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THE VALLEY OF MEXICO.



FOUNTAIN AND AQUEDUCT, CITY OF MEXICO.

FROM the belfry of Mexico's great cathedral, or a *mirador* surmounting one of its private dwellings, we command a panoramic view for picturesque beauty not easily matched, and interesting historically, geologically, and geographically. This is the Valley of Mexico.

The city stands a little to the west of its center; but from any elevated point, as above, the eye may take in the entire area of the valley to its extremest limits, east, west, north, and south. Around the full horizontal circle can be seen no real horizon—only a profile of mountains, piled high against the heavens, so high at certain points as to have summits shooting several thousand

feet above the line of everlasting snow. On the south-east, one of these, Popocatepec, or the "smoking mountain," shows an almost perfect cone; a little to the north of it, and on the same *sierra*, with only a depression between, is Ixtacihuatl, or "the white woman," of the Aztecs; by the Spaniards also termed "*La muger blanca*," from the resemblance of its snowy profile to a woman in white robes reclining upon her back. From certain points—as the western shore of Lake Tezcoco—this similarity is so striking as fully to justify the bestowal of the name.

Away westward, and a little to the south, another tall mountain, Toluca, raises its

crest, crowned with the never-melting snow; while on a very cold Winter day, should there chance to be rain fall in the valley, several intervening peaks, and even continuous ridges, will show a blanching upon their summits.

Only three real snow mountains, or *nevadas*—those above mentioned—can be seen from the city of Mexico, the first and second directly rising up from and dominating the valley, the third separated from it by a branch of the main *cordillera*—known to Mexicans as the *Sierra Madre*, or “mother chain.”

In any part of the Valley of Mexico, as in the city itself, standing upon any of its flat house-tops or walking along its streets, you can not even turn your eyes towards the horizon without seeing mountains. If down upon the pavement, it will depend upon what street as to whether these mountains be *nevadas*. But, in any case, a mountain meets the view; and although it may be ten, fifteen, or twenty miles off, it will appear close up to the suburbs of the city, and barring the passage beyond—so fine and clear is the rarefied atmosphere of the Mexican table-land.

It is customary to speak of the mountain-girdled tract of territory on which the Mexican capital stands as the “Valley” of Mexico; and in the heading of this article I have not departed from the practice. The name, however, is calculated to mislead, as the term *valle*, in Mexico and other parts of Spanish America, has a very different sense from our supposed synonym of nearly similar pronunciation. The *valles* intervening between the mountain ranges of the Mexican Andes, as also those of South America, are not valleys in the English or European sense, but simply *plains*. Table-plains, or *plateaux*, they are sometimes called, with reference to their elevation above the surface of the sea.

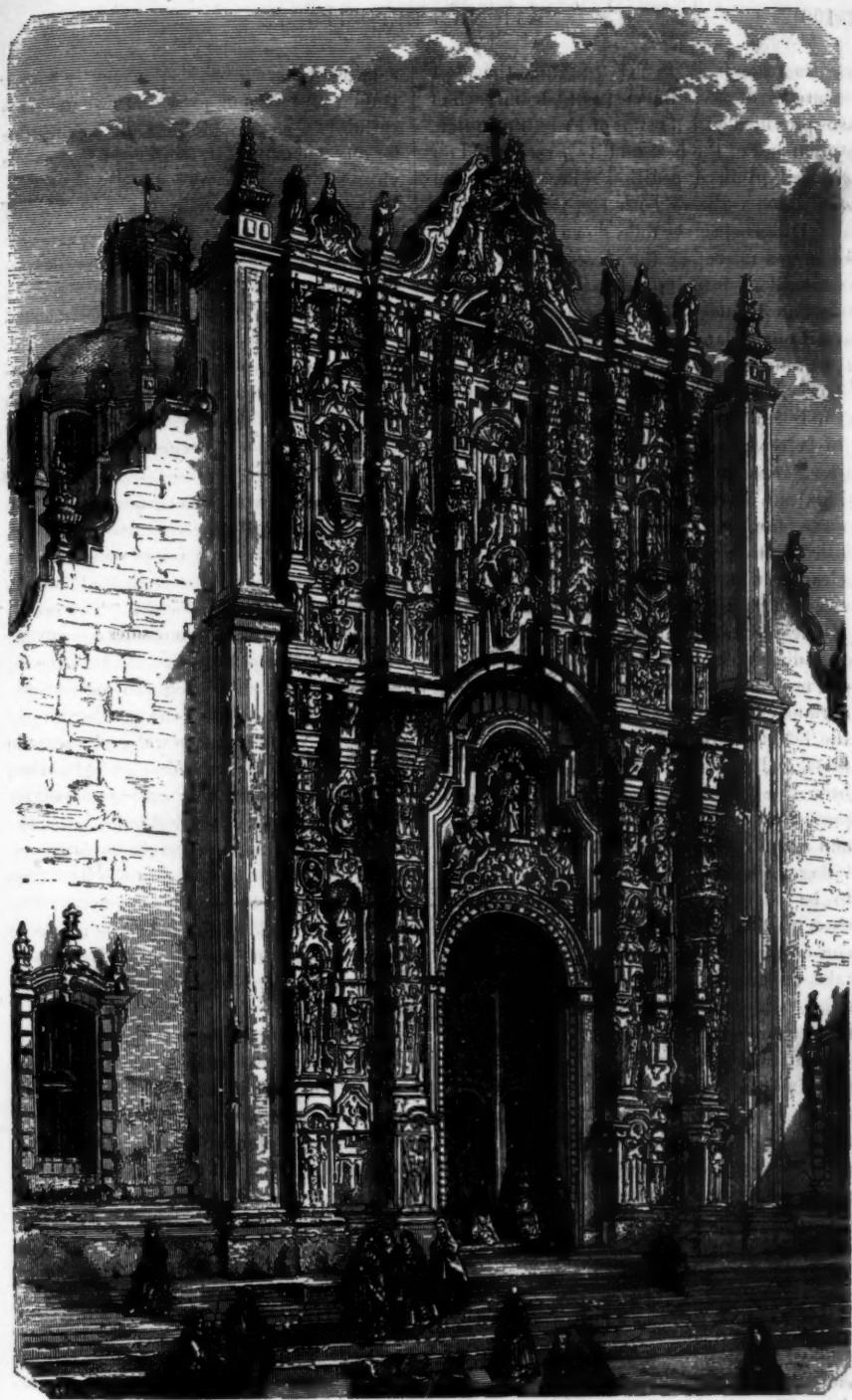
Of these, the plain on which the city of Mexico stands is certainly one of the most remarkable, lying between seven and eight thousand feet above ocean level, and yet having a large portion of its superficial area occupied by lakes. Of these lakes there are

six, all of considerable size. Maps and geographers—Humboldt among the latter—mention only *five*; but there are six, as we may have occasion to point out when speaking of them more particularly. It is scarcely necessary to say that these grand sheets of water—one of them, Tezcoco, showing a clear surface of over a hundred square miles—aid in giving variety as well as beauty to the panoramic landscape above spoken of.

The Mexican plain is still further diversified by isolated eminences rising out of it, usually of rough rocky aspect, with sides sometimes bare, sometimes scantily clad with a hirsute vegetation, in which the agave, cactus, and mezquite—the last a species of spinous acacia—are the principal plants. Many of these eminences exhibit singular forms—some conical or pyramidal; others like frustums of both, still others trending in ridges, with their sides ascending almost perpendicularly from the plain, and having table-tops—the *mesa* formation of Mexico. A large number of these are ancient *volcans*, now extinct, but with craters to prove their volcanic origin, as also extensive fields of lava around their bases—the last showing a rough seamed surface, in places quite impassable for either horseman or pedestrian. These tracts generally bear the name of *pedregals*.

Surveying the Valley of Mexico from a stand-point on the dome of its cathedral, noting these salient points scattered over its surface, and reflecting on them as rich treasures that would repay exploration, I resolved upon an excursion—a ride round the rim of this splendid amphitheater. An English gentleman, long resident in the city, agreed to be my companion and guide. In the latter capacity he was likely to be of the greatest service, since he knew every road and path leading through, into, or out of this remarkable mountain basin. He proved what I had taken him for, “the right man in the right place;” but this is anticipating.

Having chartered a pair of stout Mexican mustangs (in my opinion the best roadsters in the world), and equipped ourselves in ran-



CATHEDRAL OF MEXICO—FRONT ENTRANCE.

chero suits (also, to my thinking, the most convenient traveling costume), being each of us provided with a *serape* of Fresnillo (water-proof and of the best quality), we started on our circuitous expedition. Leaving the inn at which we were both stopping, the Casa de Diligencias, we rode down the Calle de Plateros (street of the silversmiths). This brought us into its continuation, the Calle de San Francisco, with its wonderful convent of similar name, covering several acres of ground, once a place of great monastical power, and focus of fanaticism; now, since the liberal government of Juarez, converted to better purposes. On our right, passing the *Alameda*, the Kensington Gardens of the Mexican capital, and on our left the *Acordada*, the great convict prison, generally filled with malefactors, we came out into clear open country upon the *Paseo de Bucareli*, the fashionable ride and drive of the Mexican cavaliers and *señoritas*.

Riding along the *Paseo* alone, with only one mule-mounted attendant after us, casting a glance at the *ciudadela*, or citadel, seen to the left, thinking of the many revolutions, plots, and pronunciamientos of which it has been the conspicuous source, we at length passed through the *garita* (customs' gate), and set our faces towards Tacubaya. This village, a sort of Mexican Richmond, was to be our first halting-point, bringing us close to the elevated ground forming the rim of the valley. Thence we designed to take departure, proceeding upon our circular tour to the left, and contrary to the usual course of the screw.

The road from Mexico to Tacubaya runs along side one of the two aqueducts that supply the city with water. Both are grand structures, worthy of a civilization more advanced or progressive than that of the present Mexico. They are, indeed, rather relics of the past, of the viceregal days, when the colony of New Spain vied with its mother country in almost every kind of magnificence, even in the splendor of its court. The road we followed was that which brings water from out the rock of Chapultepec, a mile's distance from the city. The aqueduct is therefore more than

a mile in length, with, of course, a corresponding number of piers and arches. It is certainly a respectable piece of architecture for any age or people, and does credit to the viceregal rule.

The other, called San Cosme, is a much more extensive affair from having a longer conduit. Its water is drawn from a mountain stream, running valley-wards from a source far beyond Chapultepec. At the base of this isolated eminence the two approach very near one another, then diverge widely, to come close again at their fountain debouchures in the city. At each of these there is some architectural ornamentation worthy of being examined—columns, pilasters, urns, statues, inscriptions—of which the engraving gives a very good idea. At either, and during all hours of the day, a crowd may be seen, who have come thither to supply themselves with water. The professional *aguador* will be conspicuous, with his leather skull-cap and two straps over it, front and back, sustaining two red earthenware jars, that balance one another in the bearing. As there are no water-pipes in the city of Mexico, the *aguador* is an institution, the men who follow this calling frequently exerting a considerable influence over the household, in times of drought bordering on the tyrannical. It is only in the dwellings of the wealthy the water-carrier can thus play despot. The poor have free access to the fountains and can supply themselves, to use a London tavern phrase, "in their own jugs."

These Mexican aqueducts are not things of European introduction. Long before the discovery of Columbus or the conquest of Cortez, the Aztecs understood this mode of transporting water from one place to another, and practiced it on an extensive scale. The ruins of their *acquiás*, or irrigating canals, are found all over the North American continent, from Panama to the "Seven Cities of Cibola." It is not necessary to add that the Peruvians were equally acquainted with the art. If not the actual aqueducts now in existence, Cortez found water-conduits of a very similar character, and carried from the same sources, conveying the

precious fluid into the streets of the ancient Tenóchtitlan. They might not have been so grandly constructed as those now existing; still did they serve the purpose required of them, which was to provide the subjects of Moctezuma with drinking water, as also for culinary uses. For bathing their bodies or washing their faces they had sufficient without aqueducts. The briny lake Tezcoco, then surrounding their city, sometimes, and too often, inundating it, gave them this to a surfeit.

Within a few years Mexico has received a supply of fresh water from a new source, independent of the aqueducts. An enterprising engineer has bored a number of artesian wells within the city limits, as also in other parts of the valley. The result has been satisfactory, not only as regards getting water, but in a sense interesting to geologists. The perforations prove, what was long suspected, that the present *valle* of Mexico was once a real valley among the mountains, that has been filled up, assuming a horizontal surface from the *silt* carried down the adjacent slopes, through ages of rain erosion.

The road to Tacubaya, running by the side of the aqueduct, passes close under the hill of Chapultepec, a place historically celebrated even before the conquest. Its summit stands some two hundred feet above the valley level, the hill on three sides showing a precipitous front towards the plain. The fourth, which is on the southern side, slopes down abruptly to its base, and for several hundred yards beyond, shadowed by a grand grove of cypress-trees, known as the cypresses of Moctezuma. On its tabular top, now occupied by a handsome edifice, erected by the Spanish viceroy Galvez, and since converted into a military college, the sybaritic Aztec emperor had a summer palace, in which he was accustomed to hold high court, and revel. The cypresses, now ancient trees, may have then been a part of the young shrubbery of the attached grounds and garden, their shadows falling softly over the brown-skinned Aztec, Opatá, and Ottamac maidens of his harem, as they do to this day over the pretty *poblanos* of

modern Mexico, who, escaping from city dust, and linked arm-in-arm with their sweethearts, seek the cool arcades of the Chapultepec cypresses for an "outing."

The cypress-grove, erst the garden of Moctezuma, lies to the southward of the hill, on that side where the ascent is easiest. Some walks laid out, with a few seats of painted mason-work, both in a rather neglected condition, are the only evidences of the place being kept as an ornamental ground. These cypresses, by the Mexicans called *ahuehuetes*, or "lords of the water," are gigantic trees, that flourish only in moist marshy soil, and nearly always garlanded by the parasite called Spanish moss (*Tillandsia usneoides*). Solitary specimens, and sometimes groves of them, are found in several places over the Mexican table-land, as at Tezcoco and Amecameca, where they are held sacred among the Indian population, as the banyan in Hindostan. Those in the garden of Chapultepec are of great age and vast dimensions, the largest being that rendered historic by the measurement of Humboldt.

Leaving Chapultepec, a short canter carried us into the streets of Tacubaya, a picturesque village composed chiefly of suburban villa residences belonging to the *ricos* of the city; among them the *arzobispado*, or palace of the Mexican archbishop. Through Tacubaya passes one of the main roads leading out of the valley of Mexico. Some distance beyond the village it commences ascending the thickly-wooded mountain chain, through passes deemed dangerous, and justly so, on account of the *salteadores*. It is the western route leading to Lerma and Toluca. Upon it these "gentlemen of the road" have long practised their profession, to the dread and damage of travelers.

It was not our route, else we might have been more cautious, two of us riding alone. Even keeping inside the valley itself, we might have felt called upon to practice caution; as the traveler is sometimes not safe close to the very gates of the city. My companion, however, as myself, besides being well-equipped, was armed to the teeth, each of us carrying holster-pistols, revolvers in

our belts, and rifles upon our shoulders. It was seen, too, that we were either Americans or Englishmen, and this among Mexican robbers is usually a pretty good safe-guard.

Mexico find a tranquil and congenial retreat from the stirring cares of the city.

A pretty clear water stream runs through the village of San Angel, and on through



STREAM IN A MEXICAN SAVANNA.

The little business we had in Tacubaya was soon transacted, after which we headed our horses towards Coyoacan, and then on to San Angel, another of those residential villages, where the *familias principales* of

Coyoacan, emptying itself into the lake of Xochimilco, at its northern end. It comes from among the mountains that bound the valley at its south-western angle. Close in to their foot is the mill of La Magdalena, a

factory which turns out coarse cotton cloths and cheap wollen *aerapes*. Like most establishments of the kind in Mexico, it is worked as well as owned by foreigners, chiefly Englishmen. In this case the proprietor was a "Britisher," and my companion having *liens* of friendship, had resolved upon paying him a passing visit. I, too, had reasons inducing me to ascend the little stream that runs through San Angel. Some miles above the village, and close into the mountain foot, is a tract of ground of which I had other souvenirs. It was the scene of a battle in which I had borne part, known to American chroniclers as "Contreras," but by the Mexicans called "Padierna." I was also desirous of visiting a noted place to be seen on the same line of tour. This was the ruined monastery of "El Desierto," mentioned in most books of Mexican travel.

We "did" the factory first; which differs very little from such establishments in England or the States, except that the "mill-girls" were brown-skinned Aztec maidens, and the mill-men yellow *leperos*, such as we had seen by thousands in the streets of the capital.

The old convent is interesting, both from its history and situation. It stands among the mountains, on a ledge or little platform surrounded by cliffs. In its cloisters, now tenantless and fast yielding to decay, once dwelt, and as report says, roistered, a band of monks, physically comfortable and mentally gay; as the brotherhood of Bolton Abbey. Turning away from El Desierto, I felt no regret in having found it literally a desert, its convent a crumbling ruin, inhabited only by two or three old men in monkish costume, who subsist upon the gratuitous offerings of curious tourists, attracted thither by the ancient reputation of the place.

After looking upon the ruins of El Desierto, and contemplating its past, it was a relief, at least to me, to stand once more on the battlefield of Contreras. The action, so-called, had been sanguinary, more especially to the Mexicans. It had no doubt wrung many a tear from child, sister, and wife; but it had also opened up a new

idea of national life, dispelling the illusions and many of the tyrannies of the past. To a certain extent it ended military rule in Mexico by making this ridiculous, and so leading to satisfaction with the peaceful *régime* under the greatest patriot and statesman that Mexico, perhaps even the American continent, has yet produced—the pure-blooded Indian, Benito Juarez.

Leaving the battle-ground called by Americans "Contreras," but, as already said, named by Mexican chroniclers, and of course more correctly, "Padierna," my English friend and I continued our circuitous ride around the Valley of Mexico. Before starting we stayed a short while in the village of San Geronimo, a mere hamlet of huts, buried under the foliage of orchard trees, principally apples and quince. Throughout all the Mexican table-land the quince is cultivated, there flowering and fruiting in a congenial soil. Every garden has its sprink-



MEXICAN MONK.

ling of these trees; and in places, as at San Geronimo, there are large orchards of it. In leaf, flower, and fruit, the quince-tree is so much like the peach, pear, and apple that

at a short distance the observer may well mistake one for the other. The village of San Geronimo, though mostly inhabited by Indians, has its stone-built church, with a *cura* of Spanish descent, and also an *alcalde* belonging to the dominant race. Otherwise it is an Aztec village.

During the battle of Padierna the church spire received several shots, that shattered and almost caused its fall. These came from Mexican cannon, planted within the entrenched camp of Contreras, where General Valencia was defending himself against the American assault. Valencia knew that the village, shrouded under its quince-trees, concealed several regiments of the American army. To disturb these, he gave orders for his batteries to play among the trees. This foolish firing was soon suspended. The brave Brigadier-general Riley—an Irishman, as might be conjectured by his name—at the head of his brigade, rushed over the Mexican entrenchments with the cry, "On, boys, and give them —!" I need not record General Riley's order in the exact terms used by him; though I can certify to its exactness, having heard it. Enough to say that the command was obeyed with such prompt alacrity that his soldiers, rushing across the entrenched line with empty barrels and bayonets at the charge, drove Valencia's troops helter-skelter out of the camp of Contreras.

It was fortunate for the fugitives that alongside a curve in the line of their entrenchment lay that singular tract known as the Pedregal. It is a field of lava, covering more than twenty square miles of the Mexican valley, and occupying its southern angle; old lava, many ages ago vomited forth from volcanoes whose craters can still be seen adjacent, though now cold and silent.

Many similar traces of a past volcanic outpouring may be met with on the Mexican table-land, known by the general name of "pedregals." That to which we allude bears a particular celebrity in the Valley of Mexico itself. It is termed El Pedregal—the lava-field, or "place of stones." Its peculiar ruggedness has given it this distinction; since it is so rough, its surface so

marked by asperity, that only in rare places is it possible for even the surest-footed pedestrian to pass over it. There are other places where a goat could not go.

A geologist would be enraptured finding himself within the mazes of the Pedregal. He might not like it so well should he chance to stray into one of its cavernous hollows, inhabited by a band of brigands or a party of footpads; both fraternities of the robber-line, when pursued, at times finding safe asylum amongst these vomitings of extinct volcanoes.

In keeping around the rim of the valley, the Pedregal offers an obstruction, at first sight impassable. A bridle track, however, crosses it from San Geronimo to San Augustine, just possible to ride over on mules or Mexican horses, that are equally sure footed. It was by this obscure and difficult path that General Scott was enabled to turn the fortifications which the Mexicans had thrown up on the southern or Acapulco branch of the national road, having already turned those of a more formidable character, constructed with greater care, on the causeway leading into the city from the east. Only a battery of "mountain howitzers," with some other light guns, could be taken across the Pedregal; so that the battle of Contreras on the American side was altogether an action of small arms, terminating by Riley's brigade charging with the bayonet. Thirty pieces of Mexican artillery, found on the field, became the spoil of the victors of Contreras. Some of them, of very ancient Spanish fabric, were curiosities in the way of cannon; not a few that might have been deemed as dangerous to their owners as to the enemy against whom they had been leveled. They were of all shapes, sizes, and calibers; of all metals—brass, bronze, and iron.

For our difficulty in passing through the Pedregal, we were rewarded by the singularity of the scene. On every side around us was a confusion, a perfect chaos of rocks. The lava is of great vertical depth, and, when molten, must have spread over the surrounding country with the current of a turbid and strong-running stream; its progress being arrested by cooling, it contracted



THE CACTUS PLANT AND FRUIT.

in volume by the same process, and became cracked; showing fissures that run in every direction, some of them as wide as a town street, others so narrow that a human body could scarce squeeze through. The surface is not all bare, black rock. Since the outpouring of the stream vegetation has sprung up over it in places where the volcanic ashes, containing organic matter, give it a chance. The cactus, maguey, mezquite, and yucca need very little sustenance from the earth, drawing most of their nourishment from the atmosphere. It is, indeed, a sterile soil where these plants can not find the means of propagation. Even in the Pedregal they are seen growing—some rising erect on the table-tops of the rock, others shooting out horizontally from clefts in the escarped faces, and still others choking up the gorges between.

Passing through the Pedregal, you may see smoke here and there curling up from it in tiny columns, and at long distances apart. If you ask what this means, it is doubtful whether you will find any one who can answer you so as to give a satisfactory expla-

nation of the phenomenon. Those who could, will in all likelihood shake their heads, and remain silent. If they speak, it will only be to utter the phrase universal in Mexican conversation—“*Quien sabe?*” Were they to tell you the truth, as they know or suspect it, they would say that these smokes, so “gracefully curling,” spring up from hearths around which there may be, for the time, peace, though not of that tranquil kind the “humble heart” might hope or wish for. If you yourself were to take a seat amongst the company there assembled, you would in all probability find yourself in the company of thieves, if not highway robbers—most certainly among men who, seen outside the skirts of the Pedregal, would be in danger of getting inside the walls of a prison. In truth, this rough tract—a very thicket of rocks—so near to the suburbs of a great city, offers an admirable stronghold for criminals—an asylum to which they can easily and conveniently escape, if pursued by the police. And they do escape to it; and there remain safe, Mexican justice making but a feeble effort to

extradite them from a district that would seem more fitted for the abode of demons than men.

After crossing the Pedregal, with the Southern Sierra closing in the valley on our right, its most commanding summit, Ajusco—an old *volcan*, though not a *nevada*—towering grandly above us, we left the lava-strewn surface, and entered the town or village of San Augustine. Its Indian name is *Tlalpam*, signifying “the place of caves,” and by the Spaniards it is called, when given its full title, “San Augustine de las Cuevas”—San Augustine of the Caves. It is a place of great, though not very saintly, repute. At a certain season of the year it is turned for two or three weeks into a sort of pandemonium, or place of deviltry. Epsom on the Derby week may give some idea of it, though only a faint one. Gambling-booths are erected in the public square of the town, in which *monte* tables are set out, and all classes of citizens seen around them. The wealth and fashion of the capital flock thither, and for days give themselves up to a reckless dissipation, accompanied by the worship of the goddess Fortuna. To her they seem to surrender themselves body and soul. Around the *monte* tables may be seen, sitting or standing, grave senators and statesmen of reputation, generals of great and glorious military fame, ladies robed in rustling silks, leaders of fashion, side by side with *poblanas*, in their *rebozo* scarfs, *leperos* shrouded under woollen *serapes*; among them a fair sprinkling of footpads and highway robbers; with a sprinkling also of priests, both of the secular and regular clergy, wearing their clerical costumes in all its different colors and orders, unblushingly laying their *pesos* and *onzas* on the chances which first turns up, knave or queen (*soto o caballo*).

The only distinction in the different gambling booths is the amount of the stakes for. The ragged *lepero*, if he can but lay down his *onza*, may enter the best of them, and bet alongside the grand *militario*, bedizened with gold lace and orders sparkling on his breast. Having only a few *reales* or *pesetas* with which to win the smiles of the fickle goddess, the poor man prefers offering his

adoration at some more humble shrine, thinking he may there have a better chance of obtaining fortune's favor.

Except during the short carnival time, San Augustine is a quiet village, and altogether an agreeable place of residence. It is picturesquely situated close to the mountain's foot, just where the main southern road going out of the valley commences its ascent of the Sierra through the pass of Cruz del Marques. Its proximity to this pass, noted as one of the most perilous for travelers, gives the town a reputation for having among its citizens a few who follow the profession of *salteadores*, or robbers of the high-road. Meeting these gentry in the street, you would not know them to be such. Enwrapped in their *serapes*, and wearing broad-brimmed hats—the ordinary costume of the common people—you could not tell them from other citizens, because almost every man of the mixed breeds in Mexico has the dark complexion and picturesque facial characteristics that we of Anglo-Saxon race are accustomed to associate with piracy and brigandism. It is this type we continually see produced upon our stage, no doubt from the old antagonism between Teuton and Roman. And doubtless the idea is a wrong one; for among malefactors claimed by the scaffold, and justly sent to it, there are as many with bay-colored hair and yellow-white eyebrows as of the contrasting tint. Some say more.

Tlalpam, like Tacubaya and San Angel, is a favorite place of Summer residence with the *ricos* of the capital; many of them having handsome houses here, with gardens and grounds attached. As already said, the great national road runs past it; which, after crossing the Sierra, that shuts in the southern side of the Mexican valley, descends into that of Cuernavaca—the latter of much lower level, and, consequently, higher temperature. At Cuernavaca the traveler finds himself in a tropical climate; the heat increasing as he continues on towards Acapulco on the Pacific, where the road terminates—both latitude and altitude to this point decreasing in like ratio. This road to Acapulco is the western or Pacific

section of the king's highway, its eastern being that which runs from the capital through Pueblo, Perote, and Jalapa, to Vera Cruz on the Gulf. In the old viceregal times it saw many a strange party of travelers; when were borne over it the rich stuffs of India and China, with the products of the Philippine and Spice Islands—the cargoes of the South Sea galleons. There is still some of this traffic, but nothing compared with that carried on in the prosperous days of the viceroyalty.

It was to enter the city by this road that the American army made its circuitous march around the southern shores of Lakes Chalco and Xochimilco. The detour was rendered necessary by the strong fortifications thrown across the direct route to the capital from the eastern side. It was a difficult march, the road around the lakes being in many places barely passable for wheeled vehicles. Their skilled sappers and miners, however, made it available. And the invading army reached San Augustine in safety and without molestation from any armed enemy. This town became the base for further operations. There Scott, dividing his little band of less than ten thousand men into two columns, sent one of them along the main road towards Mexico, while the other crossed the Pedregal, as already stated, and fought the battle of Contreras.

Directly after this action, in pursuit of the flying Mexicans, the two columns again came together on the national road, near the bridge of Cherubusco (the *tête de pont* of which was also fortified); there fought a second action on the same day, again routed the enemy, and opened the way right into the capital. On that evening Scott might have gone in, without further opposition, through the gate of San Antonio de Abad. That he did not do so was due to a sadly mistaken policy on his part. Scott, in diplomacy, if not in fighting, was outgeneraled by Santa Anna. While the battle was in progress the latter sent a truce bearer to the American commander-in-chief, promising

every thing if the invaders would but spare the Mexican capital the degradation of being occupied by a hostile army. Scott, a very vain man, and brimful of ambition, saw in the proposal a grand opportunity of distinguishing himself. To dictate terms at



A MEXICAN PADRE.

the gate of an enemy's capital, and then from generous motives march off without further humiliating its inhabitants by entering it, was something that savored of magnanimity. It was, to say the least, an original idea, and had it succeeded in execution, Scott would have won a name in history higher than he holds. Unfortunately for him, "El Cojo," as Santa Anna is usually nicknamed, was too cunning for the North American general; and, as soon as the armistice was agreed on, and the pursuit suspended, he set his engineers to work on an inner line of fortifications, to carry which cost the Americans the fighting of the two bloodiest battles of their campaign.

The capital could no longer be entered by the southern national road, and had to be approached finally and taken, as stated,

along the aqueducts, from Chapultepec. These after events, marked by so much useless blood-spilling, deprive Scott of any credit due to his idea. However grand it may appear in theory, or noble in sentiment, it failed in practice. He should have better understood the character of his wily adversary.

Leaving Tlalpam, we continued our ride, the next important point in our way being the town of Xochimilco. A little before reaching the latter place, we parted from the national road. Going out of the valley for Cuernavaca, this makes a detour a little eastward by the mountain of Xochiltepec, then turning south again into the heart of the Sierra.

Xochimilco is an ancient Indian town, celebrated in Aztec annals long antecedent to the conquest of Cortez. From its situation it should be a prosperous place, as it is a sort of entrepôt for tropical produce coming into the Mexican valley from that of Cuernavaca. For some reason not well understood; its prosperity has been stagnant; indeed, on the decline. Many of its houses exhibit signs of decay; not a few of them are in actual ruin. But this is the condition of other villages in the valley, where the *ricos* do not take a fancy to reside.

Although Xochimilco is near the main national road, it does not depend on this for its communication with the capital. It is situated upon the edge of the lake, from which it derives its name, or *vice versa*; and although the last is almost entirely covered with a sedge of aquatic plants, canal-like water-ways are kept open through it, that proceed from the town to several points on the lake edge. One of these runs due north to the *pueblo* of Tomatlan; another goes eastward to the village of San Gregorio, while a third passes off towards the center of the lake, where it forms a junction with the main artery of a similar kind, carried from the town of Chalco to the capital, of which more hereafter.

As the lake of Xochimilco is very similar to that of Chalco, the more particular description I intend giving of the latter will stand good for both. Xochimilco, in point

of size, is the fourth of the six valley lakes, its superficial area being two hundred and sixty-eight square leagues. There are several villages upon its shores, nearly all inhabited by pure-blooded Aztec Indians, who make a living by cultivating small tracts of ground, by fishing, and by employment obtained in the boats that navigate its natural canals.

Xochimilco has the largest share of this traffic, being, as stated, an *entrepôt* for the fruits and other tropical products brought over the mountain road from Cuernavaca, the transport of which is continued on by the canal leading through the lake, and on, *via* Mexicalzingo, to Las Vigas, in the capital. Skirting Xochimilco, along its southern side, runs the road over which the American army passed. It was the only one they could have taken by keeping the lake to the north, since the shores of the Southern Sierra approach the water's edge, leaving but little land-way between. Some of them even abut on it, compelling the traveler to climb over them, and making the route difficult for wheeled vehicles. The scenery is all the more picturesque, and now and then a view up a lateral ravine, down which comes a clear, brawling stream, issuing from a chaos of cliffs in the background, strikes the traveler's eye with a *coup d'œil* sudden as enchanting. But for the bristling spikes of an occasional magney, or yucca, seen growing among the rocks, one might fancy himself in a Swiss valley, or in one of the "dales" of Derbyshire. In some Mexican mountain gorges where these plants do not appear the vegetation is not very different from that of countries thirty degrees nearer to the North Pole.

Continuing along the southern side of Lake Xochimilco, the road necessarily keeping us close to the water's edge, we observed the conspicuous *cerro* of Teutli on our right, the snow-covered summits of Popocatepec and Ixticihuatl being, of course, still more conspicuous before our faces. Nearly opposite Teutli is the dividing line between the two southern lakes, a mere narrow strip of elevated land, dyke-like, and called *calzada*,

from a pathway running along it. Near its middle is the little *pueblo* of Tlalhuac, where the canal from Chalco passes, making the water communication between the two lakes.

These curious canals, called by the Mexicans *acolotes*, are a feature of Lakes Xochimilco and Chalco. Both sheets of water are in greater part overgrown by a thick vegetation, composed of various species of aquatic plants, through which it is impossible for a boat to make way. Even a slender canoe can scarce be squeezed through the close-growing reeds and rushes, and this only in places which are more open than common. But for the *acolotes*, navigation on these lakes would not be possible, and even the canals themselves occasionally get choked up by the floating herbage, and require to be cleared of it. Of the canals through Lake Xochimilco, we have already spoken. There are several of the same kind of water-ways intersecting the larger surface of Lake Chalco, the chief one being that which, starting from the town of this name, crosses the lake in a direction nearly due west, passing into Xochimilco at the *pueblita* of Tlalhuac. Thence continuing on throughout the whole length of the sister lake to Tomatlan, it there enters among meadows and maguey fields, assuming more the appearance of a regular canal with dry land alongside, though there is still a proportion of marsh to be passed through before reaching the city. In the transit between Tomatlan and its terminating point at Las Vigas, on the outskirts of the capital, the canal leads past several villages, as San Francisco, Culhuacan, Mexicalzingo, San Juanico, Ixtacalco, and Santa Anita.

Mexicalzingo, from which this portion of the canal takes its name, is a place of considerable importance and ancient historic repute, being one of the Aztec towns that figured conspicuously in the Conquest. All these villages possess some interest, from their strangely isolated position and the fact of their being rarely visited by travelers. They are generally situated amidst

swamps, so that to reach them it is necessary to take passage by one of the Indian market boats plying on the canal. Of these there are an immense number, that bring in all sorts of produce from the southern side of the valley, as also what comes across the mountains from Cuernavaca and Cuatla, the



THE MEXICAN AGAVE, OR CENTURY PLANT.

towns of Xochimilco and Chalco being the respective shipping ports of these two districts of the *tierra caliente*.

It is difficult to imagine a more animated scene than that which may be witnessed at Las Vigas, where the market-boats make their entrance into the capital. There is a public *paseo*, or drive, alongside the canal, which is, however, only frequented by the fashionable at a certain season of the year, during the *Pascua Florida*. At all other times the *Paseo Bucareli*, on the southwestern side of the city, is the attraction. On any day, however, the spectacle at Las Vigas is worth witnessing. It is, in fact, one of the sights in Mexico, to which all strangers are conducted. The boats are

laden with fruits and flowers, both those of the temperate and torrid zones, exhibiting a variety scarce to be observed elsewhere. The Indians who man them may be seen with smiling faces, making the air ring with their merry voices, as they sing an occasional refrain to the accompaniment of guitar or *jarana*. The women have their fine black hair adorned with the fairest flowers, often rare orchids, that in our clime would cost large sums of money. It is on this canal, near the *puéblica* of Ixtacalco, that the *chinampas*, or floating gardens, are seen. Travelers erroneously speak of them as being at or near Las Vigas. It is true there are market gardens there, with water-ditches around them, but the true *chinampas* are several miles from Las Vigas, along the canal edge, to the southward of Ixtacalco. I may give a more detailed account of them when speaking of other "floating gardens" that exist in the Lakes of Chalco and Xochimilco.

In going round the southern edge of the valley, when the *cerro* of Teutli is a little behind the traveler's right shoulder, he is then riding along the shore of Lake Chalco, the second in size of the six lakes, and perhaps also second in historic celebrity. In this respect Tezcoco stands first, from the fact that its waters were those that washed the walls of the ancient Tenochtitlan, as also those on which Cortez embarked his brigantines. For all this, to the student of nature, Chalco has charms and attractions unknown to the sister lake. On its fresh limpid water, life, both animal and vegetable, is varied and abundant; while Tezcoco, with its saline waves and bleak barren shores, might well be likened to the Dead Sea.

On our way between the towns of Xochimilco and Chalco we passed through several villages, *puéblitas*, standing on or near the shores of the two lakes, the names of which it is not necessary to record, though some of them, as San Gregorio and Ayotzingo, were places at the sight of which a traveling artist would have pulled out his pencil and make some stay. Even I, not an artist, can remember how much I was struck

by their quaint picturesqueness. About several of them there was a peculiarity that can not be passed over without special mention. This was the fact of their being embowered in olive groves, some of the trees showing a stature equaling our great oaks, while producing a fruit as much superior to acorns as the claret, with which they ought to be eaten, is to our best *lager bier*. In saying this I mean real claret, not *vin ordinaire*; and so understood, my words will not be construed as anti-patriotic, or throwing any slur upon our popular tipple!

I need not tell the reader that the olive-tree is an exotic in Mexico, as in all other parts of the New World. It was carried thither by the Spaniards; and although the climate of many Spanish American countries with their soil exactly suited it, strange to say, it has never been cultivated there to any great extent. The reason is not natural, but political. Spain, herself an olive-growing country, would not permit this refreshing fruit to be cultivated in any of her colonies, and thus the monopoly was preserved to her narrow-minded people; the Mexicans, in common with other Spanish Americans, having, through her three centuries of misrule, to pay a heavy tax for every olive that entered between their teeth. Of course, after the date of their independence the Mexicans were free to cultivate the olive, and, availing themselves of their freedom, they have given some attention to this branch of culture, the olive-groves in the valley yielding a considerable revenue to their proprietors.

We tasted the native-grown olives of Ayotzingo as we halted in the *posada* of the place. My British traveling companion, although sufficiently fond of beer, had lived long enough in Mexico to do without it, while he had become a noted drinker of Bordeaux, a wine the Mexicans much affect. And as they, like their Spanish progenitors, eat olives, so had he become accustomed to the tartish-tasted fruit. He was, in fact, a *connoisseur* of its quality, and pronounced those we ate in Ayotzingo equal to the best either of France or Spain. The olive-tree

flourishes to perfection in the Valley of Mexico, especially along the borders of the fresh-water lakes Chalco and Xochimilco, where it is most cultivated. In the northern portion of the plain neither soil nor sun exposure are so well suited to it, and it is there rarely seen.

After leaving Agotzingo, and before reaching Chalco, we struck another of the half-dozen roads that, leading through mountain passes, give ingress as well as egress to the Valley of Mexico. This was the "Camino de Cuatla," the route leading over the mountains to Cuatla Amilpas, another valley of lower level and tropical climate, adjoining that of Cuernavaca. Cuatla is a portion of the true *tierra caliente*, where the palm throws out its plumed fronds, and the sugar yields sap to perfection. Along this road, which is one of the least known entering the Valley of Mexico, tropical fruits and products of almost every kind are carried in great abundance. Their transport is in many places over most difficult paths, where even the sure footed mule can scarce be trusted, and a large proportion is freighted on the shoulders of the Indian who owns and brings them to market. The town of Chalco is the extrepôt on this side, whence they are conveyed to the capital by the canal spoken of.

One of the curiosities of Mexico, that which gives astonishment to every traveler, is the practice of its inhabitants, the Indian portion of them, in their mode of conveying produce to the market. Traveling along any of the *calzadas*, or roads, that lead out from the capital city, these poor proletarians may be met coming into it by scores, each bearing a burden, either on his head or shoulders, of weight sufficient to break the back of an ass. One will be seen with a pair of planks several inches in thickness, and long enough to reach quite across the road; another will have on his head at least two hundred-weight of something else; a third carries on his shoulders a crate of fowls and turkeys; a fourth brings half-congealed snow from near the summit of Popo-

catepec; a fifth charcoal from the pine forests that clothe the mountain slopes a little lower down; and many others with commodities of other different kinds, but all



INDIAN FRUIT-SELLERS.

coming from a great distance, often costing days in the transport, where the value of the article conveyed would not repay an American or Englishman for half an hour of his time.

I have seen Mexican Indians enter their capital city with a fruit crate on their shoulders, which they had carried nearly twenty miles, the contents of which, when sold, did not yield three reals, a little over eightpence! On the road from the *tierra caliente* of Cuatla Amilpas my traveling companion and I saw many of them, like ourselves going to Chalco, carrying thither their wares, brought all the way from Cuatla, a toilsome way over difficult mountains, with their prospect of gain not greater than this! We are still speculating upon the curious problem, still wondering at it, when we entered the ancient Aztec town.

SONG OF THE BROOK.



I COME from haunts of coot and hern,
I make a sudden sally,
And sparkle out among the fern
To bicker down the valley.

By thirty hills I hurry down,
Or slip between the ridges,
By twenty thorps, a little town,
And half a hundred bridges;

Till last by Philip's farm I flow,
To join the brimming river;
For men may come and men may go,
But I go on forever.



I chatter over stony ways
In little sharps and trebles;
I bubble into eddying bays
I babble on the pebbles.

With many a curve my banks I fret,
By many a field and fallow,
And many a fairy foreland set
With willow-weed and mallow.

I chatter, chatter, as I flow,
To join the brimming river,
For men may come and men may go,
But I go on forever.



I wind about, and in and out,
With here a blossom sailing,
And here and there a lusty trout,
And here and there a grayling,

And here and there a foamy flake
Upon me as I travel,
With many a silvery waterbreak,
Above the golden gravel,

And draw them all along, and flow
To join the brimming river,
For men may come and men may go,
But I go on forever.



I steal by lawns and grassy plots,
I slide by hazel covers;
I move the sweet forget-me-nots
That grow for happy lovers.

I slip, I slide, I gloom, I glance,
Among my skimming swallows,
I make the netted sunbeams dance
Against my sandy shallows.



I murmur under moon and stars,
In brambly wildernesses;
I linger by my shingly bars;
I loiter round my cresses;

And out again I curve and flow
To join the brimming river;
For men may come and men may go,
But I go on for ever.

REV. PHINEAS RICE, D. D.

THE second generation of American Methodist preachers—scarcely inferior to the first—are nearly all passed to their reward. In self-sacrifice, in bold adventure, in tireless toil, in heroism, in devotion to God and the Church, in polemic skill and sturdiness and in success, they were men of whom the world was not worthy.

Their lives were too rich in great plans and great deeds, in hard-fought battles and crowning victories, in monuments reared and souls saved, to allow of their being lost. We need the inspiration of their lives, the mantles of our translated fathers.

They were men greatly addicted to prayer, and of great faith, deep piety, and noble lives. Men of firm eloquence, scarce inferior to that of Chrysostom or Fenelon or Saurin. Their eloquence was born, not so much of the schools as of a heavenly baptism, and of clear and strong conviction of the truths they uttered, pre-eminently those of universal redemption by Christ and the freedom of the human will. With these pivotal truths in their hearts and upon their lips, their voices rang through the land like trumpet blasts.

The first generation of Methodist preachers, with Bishop Asbury at their head, was very largely an aggressive force of somewhat loosely organized scouts, going out in advance of the main army. They surveyed the vast heritage, and prepared the way; they gathered the materials. Their sons in the Gospel followed with a mightier host, and with more of organizing skill. Their work was to put together in more symmetrical form the materials gathered to their hand, and rear on broad foundations the noblest ecclesiastical edifice, in whose shadow to-day sit millions of worshippers.

Among the skilled architects of this noble temple was the subject of this sketch, Rev. Phineas Rice, D. D. So successful was he in destroying all records of his early history that nothing is known of his parents, except that they were Calvinistic Baptists, or of his early educational advantages. He was

brought up in the Baptist faith, was immersed in early life, and united with the Baptist Church. He was born in Guilford, Vt., March 29, 1786, just after the Revolutionary War, and united with the New York Conference in 1807, at the age of twenty-one. He died at Newburg, N. Y., December 4, 1861, in the fifty-fifth year of his ministry, and seventy-sixth of his age. During all these fifty-five years he sustained an effective relation to his conference, and during most of them he was among its most conspicuous and honored members.

He seemed to have a dread of posthumous fame, and persistently refused to furnish incidents of his eventful life, and declared he would burn every manuscript in his possession, which he accordingly did. When appointed by his conference to preach a semi-centennial sermon, including a sketch of his life and times, he modestly but firmly declined. Consequently, very little has been published respecting him, except an account of his funeral, his various appointments, and a few passing comments in the Church periodicals shortly after his death. The peculiar and striking characteristics of the man, the unique elements of his make-up, the sharply outlined individuality, that which made him what he was, one of the most unforgettable men, has scarcely been alluded to by the articles published at the time of his death. Indeed, an accurate portrait, at that time, when our hearts were full of sorrow, would have been inappropriate.

At an early period in life he was converted, and united, first with the Baptist, and then becoming dissatisfied with their doctrines and usages, with the Methodist Episcopal Church. All his after life he felt the impulse of this early revolution of his ecclesiastical and theological views. The necessity of immersion, as the only mode of baptism, and the dogmas of Calvinism, were dissected by him with most relentless logic and overwhelming ridicule.

In the minutes of the New York Conference, in the answer to the question, "Who

are admitted on trial?" we find, among others, the name of "Phineas Rice, single, aged 21, pious, clear of debt, sound in doctrine, zealous, five or six years in society." This was his induction into the New York Conference. As he had then been a member of the Church some six years, his conversion must have taken place when about fifteen.

In 1809 he was admitted to full membership in the conference, and ordained deacon by Bishop M'Kendree.

The journal of the conference contains this reference to his admission: "Phineas Rice, single, traveled two years, a little *funny*, acceptable, sound in doctrine and discipline. Received and recommended to deacon's orders. He was gently reproofed for his improper pleasantry by Bishop M'Kendree."

It is an amusing fact, that this reproof was graciously accepted by him, as a part of the usage common on such occasions, and not personal to himself.

It is very manifest, if not especially gratifying, that this gentle admonition failed of its purpose. His first appointment was Granville, Conn. For eleven consecutive years he remained but one year in a place. In 1818, only six years after he entered conference, he was one of four preachers in the city of New York. It was then a circuit, and the preachers alternated in the different churches. His home was near the present site of "Cooper Institute." He was only twenty-seven, single, tall, straight, fine-looking, and attractive. He was so genteel, dignified, and classical that some thought him proud. It was a native dignity which he carried through life. Twice he was appointed to Albany, four times as pastor in New York, and once in Brooklyn. He was also pastor in Hartford, Middletown, and New Haven. Twenty years after he entered the conference he was made presiding elder of the Hudson River District, extending on the west side of the river, from the Highlands to Albany, embracing a territory about one hundred miles square. He was subsequently presiding elder of Rhinebeck, Newburg, New York districts, each twice, and of Poughkeepsie district once. Eight years he was pastor in New York and Brooklyn.

He was *twenty-eight* years presiding elder. Like nearly all the older presiding elders, he owned a farm, and supplemented the small pay of the districts by the more certain products of the land. Most of the early preachers had to provide, in part, for their growing families, outside of the small salaries they received, or, as many of them did, retire from the itinerancy. It was their necessity rather than their fault.

The honorary degree of Doctor of Divinity was conferred on him by the Middletown University. From 1820 to 1856 he was a member of each General Conference, frequently at the head of the delegation, and chairman of some of its most important committees.

Few men were more intimately acquainted with the polity of Methodism, or more loyal to our doctrines. His advice was sought by our wisest Church administrators. He was a safe counselor and judicious administrator. It is not known that any of his decisions were ever reversed.

He was eminently a man of prayer. His private devotions were earnest and protracted. A preacher with whom he chanced to room, surprised at the length of his prayer, asked, "Do you always pray so long before retiring?" "Yes," was the answer, "when I have such fellows as you to sleep with." This was intended as a pleasant reproof for the exceeding brevity of his brother's devotions.

The early Methodist preachers, absent most of the time from home, and traveling large circuits or districts, with little society, when they met each other sometimes relaxed the constant strain upon their energies by the free indulgence of a rather broad humor. It was healthful medicine to the souls of men who had been for weeks amid the gravest and most exhausting duties—a freedom of the brotherhood not altogether disused in our day. No man could do his part in this line more thoroughly than Dr. Rice. His wit, humor, and repartee were spontaneous and irresistible. These jets leaped up from a fountain always full. Usually they flowed away sparkling with beauty or rippling with mirthfulness; but on some occasions his wit

was tinged with irony. Just after the session of his own and an adjacent conference, at which there had been a pretty free interchange of ministers, one of the preachers from the other conference said to him, "Brother Rice, we got the best of your conference in the transfer of ministers; the men we got from you are better than the ones we gave you." The truth of this statement was a little annoying, and the quick retort was, "Yes, you cheated us, and we are not going to exchange ministers with you again; the fact is you have the *material to cheat us with!*"

Dr. Rice was tall and erect. Age had not stooped his form. His was a large frame, made for strength and endurance. There was about him, as he appeared to strangers, an air of great dignity and gravity; his eye was dark and piercing, even to severity; great pride of character was a marked trait. It was not vanity or ostentation—these he detested—it was a manly self-consciousness. He once said, "Where I am is aristocracy." He despised no man, worshiped none, feared none. Naturally his was a quick temper, which, however, under the guiding and restraining grace of God, became one of the strong forces of his nature. He was one of the most kindly and fatherly of men; tender in sympathy and liberal in his gifts. Possessed of the highest sense of honor, he had a profound contempt for every thing mean or illiberal. Penuriousness he held to be a sin, and rebuked it unsparingly. In representing one of the preachers on his district who saved money at the expense of family comfort, he said, "This brother is a great economist; he has economized and economized, until he has nearly economized himself and his people to death."

When, as presiding elder, he had to provide his own home, it was a good one, homelike and attractive. His horse—that pet of the early itinerant—with which he traveled the districts, was of the best, and well kept. This sometimes occasioned criticism. A Quaker accosting him, said, "Phineas, thee rides a very fine horse. Isn't thee a little proud?" He answered, "The fine horses belong to God's people, the poor racks of bones

to the sinners. No man has a better right to a good horse than I." A luckless young lawyer, beardless but venturesome, attempted a little special pleading, and impertinently accosted Mr. Rice as he was riding past, on this wise: "This is Rev. Mr. Rice, I believe." "Yes." "Well, it appears to me you are better mounted than your Master was when he rode into Jerusalem." "Yes, I am; and there is the best reason in the world for it; they have made lawyers of all the jackasses in this country, and there is none left for to be ridden."

His sense of honor forbade him to seek for place, and he had very little respect for ministers who did it. His emphatic utterance on this subject was: "I never yet sought an appointment; I never intend to. It is not Methodist. I have for years noted those who are everlastingly seeking accommodation, and I honestly believe in the long run they do n't fare as well as those who leave themselves entirely in the hands of the appointing power. I would advise every young man, hands off from that business." In conference, on one occasion, alluding to the anxiety of preachers to have city appointments, he said, "I believe the preachers are all anxious to go to heaven, but they want to go by way of New York."

One of the preachers on his district, a man of some prominence, fell into the errors of Millerism at a time when the Churches were being sadly torn by that delusion. The time was fixed for the peal of the last trumpet in April, and this preacher was full in the faith, and had been preaching it to his congregation; but his term of service in that charge would expire in May. Strangely enough he was full of anxiety about his future appointment, and pressed the presiding elder to inform him, declaring that he must have a better place, that he had not been appreciated, that his abilities were equal to a city appointment; and if he could not be accommodated he must retire from the ministry. Dr. Rice listened, but was reticent. The minister demanded an answer with an offensive persistence. His presiding elder took him by the hand, gave him a scrutinizing glance, and said, "Good-bye. Your

appointment is in heaven. The brother demanded an explanation, followed him down the street, and would not be comforted until Dr. Rice said to him with severe and merited rebuke, "Your next appointment is in heaven. Hain't you been preaching to your people that the judgment was coming in April, and that all the saints are to be caught up to meet the Lord. Our conference don't meet until May, and as you are one of the saints, you will be in heaven before that time." The end of all things did not come as the modern prophets foretold. This mistaken good man received a prominent city appointment. He still persisted in preaching the Millerite doctrine. It was producing strife and division in the Church. When Dr. Rice appeared again upon the scene, entering the parsonage, he said to the pastor, "Either stop preaching these errors to your congregation, or pack up your things and leave." He did not leave, and there was no further occasion for complaint. In this case we see the overflowing kindness and forbearance of the man in giving to the erring brother one of the best appointments in the conference. We see also his fidelity to the Church; no man, however friendly, must be allowed to stand in the way of its peace and prosperity.

He had a high sense of the sacredness and perpetuity of ministerial obligations. He was grieved when he saw men of his age retire prematurely from the active work of the pastorate, or enter any other field of labor. One of the bishops suggested the propriety of his retiring from the itinerant field on account of his health, when about seventy years old. He declined to do so, and nobly battled till he fell on the field.

It was formerly the custom of each presiding elder to represent, not only his district, but each preacher on it. It was always an hour of deep interest when Dr. Rice rose to give his graphic sketches of his men. No man could read character more accurately than he. Peals of laughter or floods of tears seemed equally at his command, and followed each other with surprising quickness, and merging into each other. His portraits were not caricatures, but admirable hits.

The facetious quaintness of his remarks was finely set off and made irresistible by the severe gravity of the man. His incisive wit behind the sternness of his manner was a masked battery. Or, to change the figure, it was an undertow that swept every thing before it. Yet these representations were usually kind and appreciative. If, however, there was among the men on his district a ministerial drone, a mere hanger-on for place and pay, he received, as he deserved, unsparing rebuke. He said of one of this class: "He wishes to leave his present appointment and have a better one. His Church also wishes a change of pastors. They are agreed, and mutually pray for a divorce." On one of his districts a committee from one of the Churches waited on him to consult about a future pastor. He inquired the amount of salary they paid. They were anxious, as all Churches are, to have a first-class man, but could not afford to pay more than five hundred dollars. He heard their statement and answered: "Gentlemen, I have on my district one thousand dollar men and eight hundred dollar men and six hundred dollar men, perhaps I may have a five hundred dollar man; whatever you agree to pay for I will furnish you. Fix your own price, and I will find a man to correspond."

He had a high sense of honor. He was incapable of a mean or ungenerous act. He was tender in sympathy, and liberal in his charities; magnanimous to his enemies, and constant in his friendships. He won the confidence and hearts of the preachers, and held them in close and warm attachment until his pilgrimage was ended.

He was a man of strong convictions, and great energy of will. These gave him great force and positiveness of character. His convictions were clearly outlined. He had little sympathy with a vacillating, undecided man. On all grave questions of state or Church he was pronounced. There was no adroit and diplomatic avoidance of positive positions. He was in all cases either for or against. Added to these characteristics were great courage and boldness. He uttered his convictions in positive terms and advocated them with a persistent en-

ergy, which seldom failed of success. With these elements of character he was peculiarly qualified to lead, without the ambition to be a leader. He was a dangerous antagonist in debate. His words were few, but they went to the center of the subject in hand. His skill in detecting the weak points of an argument, in lifting the veil of sophistry, and turning the laugh on his opponent; his wit, so keen as scarcely to hurt while it wounded; his sarcasm, hot and quick and terrible as a thunder-bolt; his humor, gentle and genial as the radiance of the morning; his almost fatherly pity and tenderness of the man whom he had annihilated—all these made him a dangerous foe.

His skill in drawing absurd conclusions from the premises of another, or the "*reductio ad absurdum*" in argument, is strikingly illustrated by the following instances:

While he was absent from home a resident of the village where he lived committed suicide by hanging. A Calvinistic minister was called upon to attend the funeral. In his sermon he dwelt largely upon the mysteries of divine providence and the deep and impenetrable plans and purposes of the Almighty. He comforted the friends by assuring them that all God's doings were just and merciful, and that they must submit themselves to his will and accept the calamity as pre-ordained of heaven; that nothing, however incomprehensible to us, could take place without his knowledge and appointment. Dr. Rice upon his return heard of the sad occurrence and also of the sermon. The whole range of controversy along the lines of Calvinism was as familiar to him as his alphabet, and he sought the first opportunity to use his polemic lance upon the man of stern decrees. Meeting him shortly after at the post-office in a crowd of spectators, after mutual greetings, he said, "This is terrible news I hear upon my return." "What do you refer to Mr. Rice?" "Why, God Almighty has been hanging a man on an apple tree." "Why, Mr. Rice, how dare you say so?" "How dare I say so! How dare you say so!" "You are mistaken, I never said so." "Did you not say at the funeral of that man that it was

one of God's strange dealings, and that the friends must bow submissively to divine appointment, that God ordered all these things in infinite wisdom? You did tell the people that God Almighty hung that man on an apple tree." There was no escape from the dilemma, and the minister implored him not to mention it again.

He took great interest in the young men on his districts. In conversation with an eminent divine he said, "Give me a young man who has gumption and I can make something of him." One of his preachers who imagined himself in declining health, proposed to retire from pastoral work. They were riding together and talking of the proposed superannuation. Dr. Rice opposed it because he believed the man able to do full work. The conversation turned upon earlier days, and the brother boasted of his former swiftness of foot and that he was still pretty good at a race. Instantly the presiding elder saw a chance to test the strength and endurance of the brother, and proposed a foot race, declaring his belief that, old as he was, he was the fleetest man of the two. The controversy became earnest and warm, and coming to a level place in the road, they tied their horses to a tree, stripped for the race and championship, and a moment after two stalwart Methodist itinerants were seen flying across the plain. The invalid won the race after a long struggle. Panting for breath as he came last at the goal the discomfited elder cried out, "You sick! You ask a superannuated relation! If you do I will tell the conference all about this race, and they won't grant your request." The sick man kept at his work—he was cured.

At a week evening appointment for preaching in one of the large city churches, he found only the sexton present. It was stormy. He proceeded with all gravity and in due form with the services, took his text and preached to the astonished sexton. He then directed him to take up the collection, the preacher being the only contributor. He always had a congregation in that place afterward, even if it stormed.

There are few presiding elders who are not annoyed by self-called men who are clamor-

ous for license to preach. One of this class went to Elder Rice and presented his case. He was a coarse, rough man without education or refinement and with very limited capacity. No one had discovered any evidences of his call but himself. He was persistent in his demand; he was called of God, and there was a fearful woe if he preached not the Gospel. So clear was his conviction of duty that he felt he must be damned if he did not obey. Rice surveyed his man, took in his full measurement and then, with a sigh, said, "I am very sorry, for if you must preach or be damned, there is no help for you; you can not preach, and you will have to be damned."

His social habits were peculiar. Like many of the early preachers he was an inveterate smoker. When at the homes of the preachers or among his friends of the laity, he smoked and talked the hours away until from twelve to two o'clock at night. His fund of anecdote was inexhaustible. On these occasions he laid aside his wonted dignity and lived over again the heroic days of earlier years; gave sketches and incidents of men graphic as the pencilings of Cruikshank or Nast. His narratives, grave and humorous, tragic and comic, held, not only the older inmates of the family, but the little children, who had to be driven away from the enchantment that held them to their bed-chambers, there to dream over the marvels they had heard. Sometimes there was a slight run of superstition in these long midnight talks. His incidents took on a weird aspect. Footprints of the marvelous, dimly outlined shadows of the strange and insecure fitted past; startling dreams, visions, ghosts, haunted houses made a dark background to a picture vivid with a perfect masquerade of the comical.

At times he would grapple with gravest questions in theology, the nicest points in metaphysics, or the most abstruse problems in science, sometimes purposely presenting the most absurd views, and maintaining them with an ingenuity of argument that silenced if it did not convince. In these long evening talks he often preferred the weaker side of a question, for he was a great adept at sophistry.

As he was frequently from home for weeks at a time, and these nocturnal talks continued night after night, and as he was an early riser, the wonder grew how he could live with so little sleep. An inquiry of his wife revealed the fact that he came home exhausted and slept almost constantly for days.

There was a strange personal fascination about him. His looks, his words, his manners were never forgotten. Few of the great lights of the Church are much talked of after they have been buried a few days; but his name and memory will linger as long as any of his generation live, and will be handed down to generations yet to come.

Most of the incidents of his early itinerant life are lost beyond recovery. The following has been preserved by an admiring friend with whom he spent a night not long before his death. It occurred at Thunder Hill, in the Catskill range of mountains, more than sixty years ago. The country was newly settled. After preaching in the neighborhood he was invited to be the guest of a newly married couple, who lived in a little cottage in the wilderness. After the evening repast and prayers, his host said, "You see, Mr. Rice, we have only one bedroom in our house, and that, of course, is occupied by my wife and myself; but I have a bed fitted up in the barn for my guests." This intelligence was a relief to the minister who had been in anxious thought about the possible place of his dreams. With unlighted candle in hand the young man led the way through the woods some forty rods to his barn. It was made of logs rudely put together, was of recent construction and was without doors or fastenings. The bed, however, and all its appointments were of the most approved orthodoxy for sixty years ago. "This is your bed, Mr. Rice," said the host, lighting the candle and putting it down. "I hope you will rest well; we shall have breakfast soon after sunrise; good-night." The pioneer preacher, left alone, read a chapter in the Bible and prayed, then sank into the voluptuous feather bed, saying to himself, "Well, I've nobody to quarrel with here. I'm monarch of all I survey." Of this, before the morn-

ing, he was not quite so certain. Ministers are not all like Mr. Wesley, who, after preaching, almost invariably fell asleep in five minutes after retiring. Many find it impossible to cool the fevered brain and check the impetuous current of thought. It was a quiet moonlight September night, the moonbeams were gleaming through the quivering forest leaves and through the open crevices of the log barn and pouring a flood in at the open doorway. It was just the night and that was just the place for wakefulness and thought, slightly suggestive of loneliness and danger; but the shadowing wings are in the forest and stretched over the lonely ones, as verily as they are above the multitude.

It was "noon of night," his eyes were still waking, when there stole out from the depths of a distant ravine the wild, startling howl of a wolf. Immediately a responding howl came from another quarter, that was answered by another and another. Soon the woods resounded with the dismal uproar, until a full chorus echoed along the defiles of the mountains, every moment approaching nearer. What could the beleaguered itinerant do? Get up, dress, run for life, climb to a hiding-place in the barn? Alas! there was no escape. To run was to go into the jaws of death; there was no loft in the barn to flee to. He sweat and trembled and prayed, expecting that his end had come. Thirty or forty howling brutes, famished and blood-thirsty, were at the open doorway. He saw them, heard the snapping of their jaws and their gruff snarls as they fought each other. They thrust their heads into the doorway. But above all, there was One who said, "Hitherto, but no further." At dawn of day the disappointed brutes skulked away to their mountain dens, and released their tortured prisoner.

After a sleepless night, there went up to heaven an offering of devout thanks to Him who holds our lives in his hands.

Dr. Rice was a great friend of the Quakers, and was highly esteemed by them. He often preached among them. On one occasion he was discoursing to them of the guest without a wedding-garment. He insisted

that the man must have been a Friend, and among Friends, as they used their manner of speech, "How camest *thou* in hither, not having on the wedding-garment?" and then the man was "*speechless*."

Preaching at another time on the subject of baptism, when there was a mixed congregation, many of whom were Baptists, after an exhaustive argument, liberally spiced with wit and sarcasm, he declared with emphasis that there was not a single instance of immersion recorded in the Bible. This gave offense, and an explanation or apology was demanded. He seldom took the back track, but did it in this instance, as follows: "My friends, I believe I made a mistake in saying there were no instances of immersion named in the Bible; I now recollect two distinct occasions, one, that of Pharaoh and his host in the Red Sea, and the other that of the devil-infested herd of swine in Genesareth lake." It is not known how far this apology relieved the case.

As a pastor, he was diligent and impartial, full of sympathy for the afflicted and generous to the poor. His administration of the affairs of his Church was marked by equal skill and prudence. He was an adept in Church finances. Under his direction one of our largest churches in the city of New York was built. At a collection taken in love-feast, where none but members of the Church were present, the amount received was unreasonably small. A public service followed; he stated the amount given by the "Christians," and then called for a collection from "sinners," stating his belief that they would be more liberal than the "saints," requesting at the same time that only "sinners" should contribute. The second collection was the larger.

At one time Mr. Bennett, proprietor of the New York *Herald*, was in the habit of attending his church. A collection for some charitable or benevolent purpose was to be taken. As the baskets were being passed, he called to the collectors to give every one a chance; then turning his eyes toward the gallery, he added: "I see Brother Bennett is here, and he will give you five dollars." The five dollars were given, and the next

morning the *Herald* stated the fact, together with this sharp but pleasant retort: "I hope no long-fingered dominie will ever get hold of that five-dollar bill."

He drew large congregations, and held them with a strange and fascinating magnetism. His ministry was fruitful of good. Many were led by him to Christ. There was a mutual and strong attachment between him and the flock over whom the Holy Ghost had made him overseer.

In the pulpit he was a man of power. There was a versatility possessed by few. He was commanding in appearance, dignified, grave, and self-possessed. There was great flexibility of voice. At times it was soft and gentle as an *Æolian* harp, then sharp and shrill as a clarion; and then, at the conclusion of an argument, it was like the thunder of a cataract.

His preaching was largely argumentative. Like most of the giants of early Methodism, he delighted in controversy. At almost every sermon some error was tortured by a raking fire. What added to the ludicrousness, if not the tragedy of the scene was, that the representative of the doctrine antagonized was always supposed to be present. No man knew better how to torture this poor victim than Dr. Rice. Quick to detect the weakness of an argument, an adept at sophistry, with a keen sense of the ludicrous, a vein of humor so disguised as always to take his audience by surprise, and an incisiveness of wit, interwoven with argument and sarcasm; he was irresistible before a popular audience. He plied his antagonist with questions, and made him answer, forced him to confess the absurd and ridiculous conclusions drawn from his own premises, and then held him up in sad plight to be gazed at and pitied.

At the time when New England, and especially Yale College, was busy with new theories of man's moral freedom, and when the self-directing power of man was seriously called in question by learned divines and professors, and it was insisted that man was under the control of the strongest motives, with no will-power to resist, Dr. Rice, at one of his quarterly meetings, ar-

raigned this error. He reasoned at length, insisting upon the freedom of the will, the self-determining power of man; that with this power man is responsible, and without it he can not be held to answer, under a righteous government; that in case the motives on either side are equal, and there be no self-determining power in man, he must inevitably fail to act either way; that if one of these learned divines should chance to be overtaken in the streets by influences equally attractive in different directions, he must stand there until he turned to a mummy. Then, to make the theory look ridiculous, amid outbursts of laughter, he drew a picture of a hungry horse, just midway between two stacks of hay, equally good and equally accessible; looking first at one, then at the other, feeling the growing pangs of hunger, but the attraction being exactly equal, and the poor horse having no self-control, perished for lack of food.

Frequently his preaching was deeply religious. His earnestness was intense, and his appeals pungent. There was stirring thought and deep pathos, and his audiences were moved to tears and thrilled with overwhelming emotions. He seemed unconscious of that quaintness which often compelled his audience to smile through their tears. It was native in him, and it were folly for others to attempt an imitation. On one occasion he was preaching for the writer. It was one of the most sublime and touching sermons I ever heard. It was on the love of Christ. Tears were falling like drops of rain. In the midst of a passage of irresistible force and beauty, and when no one thought of a close of the sermon, he turned suddenly to me and asked, "What time is it?" Taken by surprise, I looked at my watch and answered, "It is just twelve o'clock." Without another word, he said, "Amen. The people want their dinners." He gave no countenance to laxness in morals, and showed no mercy to dishonesty. While preaching on Long Island, he found that there were some on the south side of the island who considered every wrecked vessel and its cargo lawful booty. He found some of them in the Church, and denounced

them as land pirates, and gave public notice that a repetition of their crime would be followed by trial and expulsion from the Church. This warning was effectual.

His preaching had an occasional infusion of metaphysics. In one of his sermons he gave an *a priori* argument for the Trinity, the chief point of which was, that God could not impart to others what he did not himself possess; that as he has made us social beings, he must have had the social elements in his nature, and if these elements were a part of his make-up, there must have been some object upon which to exercise them; else why have them at all? And as God existed before men or angels, in the eternity of the past there must have been more than one person in the Godhead. To a vast audience he preached for half an hour in support of deism, and then for thirty minutes demolished his own arguments.

He was skilled in sophistry, and often resorted to it among his friends for amusement, or to test the skill of others in detecting its fallacy. Even in the pulpit he sometimes indulged in it in order to offset sophistry and make an antagonist look ridiculous. No man knew better than he how to weave a network of ingenious and plausible fallacy around an antagonist. He was a careful student of men and books, and also a close observer; and kept abreast of the age in which he lived. In politics and Church polity he was of the conservative school. Radical reformers found no sympathy with him. He was opposed to the antislavery agitation in the Church and in national politics, but emphatic in his denunciation of the Southern secession from the Methodist Episcopal Church on account of slavery. With great emphasis he declared his belief that Bishop Soule could have prevented the severance if he would. In the last sober hours of the sick-room, when slavery had its bloody hand on the nation's throat, and the stern question came, "Shall slavery or the nation die?" his patriotism asserted itself, and he declared that, as this shame and curse had divided the Church, and was bringing disaster and ruin upon the nation, it must perish forever.

It would be great injustice to the subject of this sketch to leave upon the mind of any the impression that wit and quaintness and humor were the only, or even the principal, qualities of the man. They were the mere sparks of as pure a flame as ever burnt on human altar—the sharply outlined hill-tops hiding the fertile vales that lie between. There was a wealth of mind, a fertility of thought, a vigor of imagination, and a depth of tenderness and sympathy which made up the solid worth of the man. Between the spontaneous outbursts of unpremeditated mirth there were long reaches of intense and earnest thought—a substratum of good sense and solid piety, which made up the staple of life. In the pulpit he was earnest, pungent, pathetic, and often sublime. At times his magnetism was irresistible. No one ever forgot his preaching. It was the farthest remove from tame mediocrity, and marked by striking originality in style and substance. It either pleased or offended beyond the ordinary degree. Yet the offended would come back to listen, and often to become warmest friends. If dealing with old and familiar thoughts, he avoided the ruts of other men, and clad them in new, if sometimes fantastic, garments.

He was an ordained leader, and that without any seeking of his own. In legislative halls, on the judicial bench, in the chair of the executive, on martial field, as well as in ecclesiastical bodies, he would have been a marked and foremost man; such not by trick and management, but by merit. He was endowed by remarkable energy of will. This gave him great steadiness and persistence, as well as fortitude. He seldom hesitated or wavered or turned back on his course. His positions were unmistakable on all great political and moral questions. He never retreated. In his advanced years he was at times a great sufferer, but pursued his work with untiring industry and uncomplaining patience. Nothing but absolute impossibilities prevented him from being at his post; however distant his appointments or difficult of access, he was in his place. His physical infirmities often awakened the sympathies and called out the remonstrances of his

friends; but he held on his course, and often when in the pulpit forgot an inflamed and bleeding throat, and preached with the vigor of earlier days.

At one time Dr. Clark—afterward bishop—and myself received word that he was very sick. We hastened to see him. He was in a most critical condition. On entering his room and inquiring after his health, he answered with irrepressible humor, "I am worth twenty dead men yet." In a few weeks he was up and at his work again. His last appointment was to the Newburg District. In the beautiful city which gave name to the district Dr. Rice had purchased a pleasant home. As circuit preacher in earlier life, he was familiar with its territory, and acquainted with many of its inhabitants, some of whom were the fruits of his ministry. But the burden was too great for his strength. He dragged himself to his appointments, a willing soul in a shattered frame. His last Sabbath of active labor was spent in Rondout. No man of less energy and will would have thought of preaching. He was unable to leave his bed. The Methodist house of worship was in process of repair, and he had been invited to preach in the Presbyterian church. It was with great difficulty that he reached the pulpit. The text was, "And as he reasoned of righteousness and temperance and judgment to come,

Felix trembled." He preached with great acceptability, and at times there were some of those sudden and thrilling outbursts of thought and pathos for which his sermons were so remarkable. It was the fitful, final blaze of a light that had shined for half a century amid the altars of God—one of the golden candlesticks.

After this service he insisted on filling a distant appointment in the afternoon, and was dissuaded from it with great difficulty. Soon the reaction came, and he sank down utterly prostrated. After a restless night, he hurried home. When arrived at Newburg he refused offered help, and walked nearly a mile up a steep ascent to his house. It was his last return. A few weeks of patient waiting and suffering and the end came. It found him ready. No ecstacy, but confidence and unwavering trust. He said to Bishop James, "I feel that God loves me. I love Jesus Christ, and I trust in his atonement. I have no fear, I have no fear." Rev. Dr. Richardson, his intimate friend of more than half a century, asked him if he had any message to send to his conference. "No, my life is before them." To another he exclaimed, "I have a building of God, a house not made with hands, eternal in the heavens." With many co-laborers and a host saved by his ministry he now occupies that house above.

WORDSWORTH.

HAWTHORNE was accustomed to speak of himself as having been for many years the most obscure man of letters in America. With equal truth Wordsworth might, at one period of his life, have called himself the most decided poet of Great Britain. He entered upon his active career at a time when men were breaking with old and long established traditions; he saw the artificial methods which lay at the base of much of the poetry of the preceding generation; he recognized, as none had done before him, the essential dignity of man,

as man, independent of all external circumstances. Of such a theme he proposed to sing,

"No other than the very heart of man
As found among the best of those who live—
Not unexalted by religious faith
Not uninformed by books, good books, tho' few—
In nature's presence; thence may I select
Sorrow that is not sorrow but delight;
And miserable love, that is not pain
To think of, for the glory that redounds
Therefrom to human kind and what we are."

Not only man but nature was to be the subject of his muse, and nature, in her gentlest and most winning aspects, such as had

been unnoticed by any previous poet. He could say

"Thanks to the human heart by which we live,
Thanks to its tenderness, its joys and fears;
To me the meanest flower that lives can give
Thoughts that do often lie too deep for tears."

Not only choosing new themes, but casting aside all previously conceived rules in regard to the distinctive diction of poetry, he ventured to come before the public in two volumes. A recent critic has pronounced these volumes to have contained the "very ore of his genius." A contemporary one considered them only "bathos and puerility." The *Edinburgh Review* was at that time the "thunderer" of the literary world. Jeffrey, of that *Review*, seized the work, made merry over it, selected its weakest points, overlooked its excellencies, and dwelt upon "the commonplace and matter-of-fact lines" which even its friends could not fail to see. As a result, not a volume of the poems was sold for a year. The few who loved, appreciated, and believed in him, could write only words of condolence. To one such Wordsworth replied: "Trouble not yourself upon their present reception. Of what moment is that compared with what I trust is their destiny?—to console the afflicted, to add sunshine to daylight by making the happy happier; to teach the young and gracious of every age to see, to think and feel, and, therefore, to become more actively and securely virtuous: this is their office, which I trust they will faithfully perform long after we (that is, all that is mortal of us) are moldering in our graves. . . . I doubt not you will share with me an invincible confidence, that these writings (and among them these little poems) will co-operate with the benign tendencies in human nature and society, wherever found, and that they will in their degree be efficacious in making men wiser, better, and happier." A noble confidence! Was it based on self-knowledge or self-conceit? The result has amply justified the prophecy.

Already a few choice spirits had recognized the coming poet. Some of these might be found in the *Review's* own city of Edin-

burgh. The biographer of Norman Macleod publishes a letter from one of his friends giving his feelings toward "Billy," his familiar name for Wordsworth, the poet of his soul. "The admiration and study of Wordsworth," says this letter-writer, "were not then what they afterwards became, a part of the discipline of every educated man. Those who really cared for him in Scotland might, I think, have been counted by units. Those, therefore, who read him in solitude, if they met with another to whom they could open their mind on the subject, were bound to each other by a very inward chord of sympathy. I wish I could recall what we then felt as on those evenings, we read or chanted the great lines we already knew, or shouted for joy at coming on some new passage which was a delightful surprise. Often as we walked out on Winter nights he would look up into the clear moonlight and repeat:

'The moon doth with delight
Look round her when the heavens are bare,' etc.

I verily believe that Wordsworth did more for Norman [Macleod], penetrated more deeply and vitally into him, purifying and elevating his thoughts and feelings, at their fountain-head, than any other voice of uninspired man, living or dead." Principal Shairp, in an essay written for the especial purpose of acknowledging his indebtedness to him, says, "There are many now in middle life who look back to the time of their boyhood or early youth, when Wordsworth first found them as a marked era in their existence. They can recall, it may be, the very place and the hour when, as they read this or that poem of his, a new light as from heaven dawned suddenly within them. The scales of custom dropped from them, and they beheld all nature with a splendor upon it as of the world's first morning. The common sights and sounds of earth became other than they had been. The heart leapt up to the white streaks of cloud and looked on the early stars of evening with a young wonder never felt till then. Man, too, and human life, cleared of the highway dust, came home to them more intimately, more engag-

ingly, more solemnly than before. For their hearts were touched by the poet's creative finger and new springs of thought, tenderer wells of feeling broke from beneath the surface. . . . Something of this service Wordsworth, I believe, is fitted to render to all men of moderately sensitive heart, if they would read attentively a few of his best poems." Frederick W. Robertson in his lecture on Wordsworth permits us to see how *his* heart had been won by the poet's "unworldliness, disciplined feelings for nature," and even how he sympathized with "his lack of all sense of the ridiculous, which made all the world, even to its meanest things, a consecrated world."

Nor, whatever the critics might say, were there wanting some even among his brother poets, ready to extend to him the right hand of fellowship. Coleridge, when at Cambridge, read the Descriptive Sketches, and "finding in them something he had never found in poetry before, longed to know the author."

Thus Wordsworth lived, calmly writing on, confident of the value of the talent which had been committed to his keeping; thus he bided his time, rejoicing for the truth's sake, when he had won a disciple, intent only on doing his duty and "educating his public."

There came a time while he yet lived when derision and scorn were no longer his portion, but instead came honors thick and fast. We are told that Oxford made quite a literary festival, when, in 1839, she conferred upon him the degree of D. C. L.

But the days of his obscurity were days of poverty. After leaving his university at Cambridge, his friends (he was an orphan) desired him to do something for himself; nor was he willing to be dependent upon them. Plainly the muses would not lift him out of his poverty—he therefore turned away from his contemplative life and began to think of journalism, "for," said he,

"How can he expect that others should
Build for him, sow for him, and at his call
Love him, who for himself will take no heed at all?"

While still undecided his friend Raisley Calvert died, leaving him a legacy of nine

hundred pounds, for he had faith in his genius and trusted thus to secure him some leisure. A competence, thought Wordsworth, and refusing all his friends' advice in regard to worldly prudence, he decided upon a life of "plain living and high thinking." Now he could have his loved sister Dorothy with him; now he could marry his cousin Mary Hutchinson, so beautifully described by him as—

"A creature not too bright or good
For human nature's daily food;
A perfect woman, nobly planned;
To warn, to comfort, and command;
And yet a spirit still and bright
With something of an angel's light."

Turning his back upon the world's allurements, he sought in the wilds of Northumberland, amid nature's solitudes and in domestic happiness, the wisdom he needed for his life work. Nor did he always *seek*; he tells us he learned a "wise passiveness," he merely submitted himself, at times, to nature's teachings and drank deeply of her lessons.

"Think not 'mid all this mighty sum
Of things forever speaking,
That nothing of itself will come,
But we must still be seeking."

Thus, living among the mountains, the fields, and the woods, studying, or wisely and passively submitting to their influence, interesting himself in all human kind, beggars, paupers, way-side tramps, as well as the more reputable among his fellows, he gradually found his poems becoming peculiarly remunerative; yet he never forgot the gratitude he owed to the friend who had made this life of contemplation possible. Thus he writes in one of his sonnets:

"Calvert! it must be not unheard by them
Who may respect my name, that I to thee
Owed many years of early liberty.
This care was thine when sickness did condemn
Thy youth to hopeless wasting, root and stem,
That I, if frugal and severe, might stray
Where'er I liked: and finally array
My temple with the muses' diadem.
Hence, if in freedom I have loved the truth;
If there be nought of pure or good or great
In my past verse, or shall be, in the lays
Of higher mood, which now I meditate.
It gladdens me, O, worthy, short-lived youth
To think how much of this has been thy praise."

But "the admiration and study of Wordsworth" is no longer "a part of the disci-

pline of every educated man." This may be ; still, either directly or indirectly, every educated person among the English-speaking peoples has been touched by his influence. He made himself felt by the leaders of thought. The reverence for man, which he first brought prominently into literature, is still felt. It seems strange to us to read of the scorn which followed the *Excursion*, so soon as it became known that its hero was a peddler ; but the fact that such a character would be no longer odd is to be attributed to him.

In nature, too, he noticed the little things which all eyes might see, yet so few do ; thus :

"The grass is bright with rain-drops ; on the moors
The hare is running races in her mirth ;
And with her feet she, from the plashy earth
Raises a mist that, glittering in the sun,
Runs with her all the way that she does run."

Where will we find a more beautiful description of the rush of swollen waters through a valley than this ?

"Loud is the vale ! the voice is up
With which she speaks when storms are gone,
A mighty unison of streams !
Of all her voices, one !"

And any of us, in such a scene, might have seen with the bodily eyes the one lone, quiet star on the mountain-head, yet who but he would have thought of it as contrasting with the valley's uproar ?

"Loud is the vale ! this inland depth
In peace is roaring like the sea ;
Yon star upon the mountain-top
Is listening quietly."

All modern poetry is more or less permeated with the feeling of nature he introduced. Wordsworth, somehow, saw the earth "not as a heavy, gross, dull mass, a ball of black mud, painted here and there with some other color," but rather as if it were a "living, breathing power ; not dead, but full of strange life :"

"And 't is my faith that every flower
Enjoys the air it breathes."

Among our modern poets may occasionally be met much of this same tenderness. In Bryant's "Among the Trees," my readers will remember the stern joy he supposed to be felt by them as they wrestled with the wind, and their sense of loss when a strong

branch is torn off from some sentient limb. Whence but from Wordsworth came this spirit ?

But more than any other poet, Wordsworth possessed a feeling of the strange mystery and ideality of childhood.

Mrs. Browning makes her Aurora Leigh say :

"I have not so far left the coasts,
Of life, to travel inward, but I sometimes hear
The sounding of the outer Infinite, which unweaned
babies
Smile at in their sleep, when wondered at for smiling."

Is not this a faint echo of the feeling which prompted Wordsworth to say :

"Thou, who didst wrap the cloud
Of infancy around us, that thyself
Therein, with one simplicity awhile
Might'st hold, on earth, communion undisturbed."

Upon this ideality of childhood is based the entire *Ode on Immortality*.

"Heaven lies about us in our infancy !
Shades of the prison-house begin to close
Upon the growing boy ;
But he beholds the light, and whence it flows
He sees it in his joy.
The youth who daily from the East
Must travel, still is Nature's priest,
And by the vision splendid
Is on his way attended ;
At length the man perceives it die away,
And fade into the light of common day."

Earth fills her lap with pleasures of her own
Yearnings she hath in her own natural kind,
And even with something of a mother's mind,
And no unworthy aim ;
The homely nurse doth all she can
To make her foster-child, her inmate man,
Forget the glories he hath known,
And that imperial palace whence he came."

Surely, since He trod the earth "who spake as never man spake," saying of the little ones, "Of such is the kingdom of heaven," few have loved them or gloried in their ideality as Wordsworth did. Yet he bequeathed this spirit, too, as a legacy to our modern literature.

Wordsworth has been called a Pantheist. Pantheism has been well defined as "a tendency to recognize the divine every-where—a personal God nowhere." He never adopted any such philosophy as a belief of an impersonal God ; still, in some of his earlier poems he dwells with such rapture upon nature and its soothing influences that one scarcely wonders at the charge ; but as the years go on, and the necessity of a revealed faith is

more urgently felt, all suspicion of Pantheism disappears:

"How beautiful this dome of sky!
And the vast hills, in fluctuation fixed
At thy command, how awful! Shall the soul,
Human and rational, report of thee
Even less than these? Be mute who will, who can,
Yet I will praise thee with impassioned voice.
My lips, that may forget thee in the crowd,
Can not forget thee here; when thou hast built
For thy own glory in the wilderness,
Me didst thou constitute a priest of thine,
In such a temple as we now behold
Reared for thy presence; therefore, am I bowed
To worship here and every-where.

Come, labor, when the worn-out frame requires
Perpetual Sabbath; come, disease and want,
And sad exclusion through decay of sense;
But leave me unabated trust in thee,
And let thy favor to the end of life
Inspire me with ability to seek
Repose and hope among eternal things,
Father of heaven and earth, and I am rich,
And will possess my portion in content."

And yet there is another charge—"The truths of revelation, though every-where acknowledged, are nowhere brought prominently forward." There are times when nature must fail, when only the God of nature, speaking through his revealed Word, can "minister to a mind diseased." Let us acknowledge that even Wordsworth has his limitations, and this is one of them. Yet if he seldom ventures within the inner sanctuary, he every-where leads to its outer court, lifting our thoughts into a region

"neighboring to heaven, and that no foreign land." Wordsworth in early life was a wanderer in a labyrinth of mental doubt. The French revolution had at first gladdened, then pained and shocked him. It seemed that he almost lost sympathy for man, and faith in God, but at length he found that,

"One adequate support
For the calamities of mortal life
Exists—one only: an assured belief
That the procession of our fate, how'er
Sad or disturbed, is ordered by a Being
Of infinite benevolence and power,
Whose everlasting purposes embrace
All accidents, converting them to good."

Principal Shairp closes an extended study of Wordsworth as a man and a poet with this significant estimate of his subject, with which we will also close these fragmentary notices:

"What earth's far-off, lonely mountains do for the plains and the cities, that Wordsworth has done and will do for literature, and through literature for society; sending down great rivers of higher truth, fresh, purifying winds of feeling, to those who least dream from what quarter they come. The more thoughtful of each generation will draw near and observe him more closely, will ascend his imaginative heights, and sit under the shadow of his profound meditations, and, in proportion as they do so, will become more noble and pure in heart."

WAITING FOR THE TIDE.

COME down! those shadowed sands invite,
And that soft glory on the deep;
We breathe an atmosphere of light
Subtle as dew and calm as sleep.

See, here and there, beyond the foam,
A sail is shining like a gem;
I think the boats are coming home;
We'll linger down and look at them.

Not yet; the tide is shy, and stays
By this gray limit of our pier:
It doubts, it trembles, it delays,
Yet all the while is stealing near.

The boats and we must wait its will:
O pleasant patience! they to make

(While we behold them and lie still)
A hundred pictures for our sake.

O happy patience! Not a hue
Can flutter through the changing air,
Or mold the cloud, or touch the blue,
That is not meant for them to wear.

And as they watch the glimmering sand
That warms the film within the foam,
They know the certain wave at hand—
The tender wave that lifts them home!

It comes—they pass—each turning sail
Is first a hope and then a bliss;
Come back, and dream a fairy tale
That hath a close as sweet as this!

AN ASCENT OF ARARAT.

[CONTINUED.]

CONVINCING myself that there was nothing rash in proceeding, I fell to work upon the trachytic crags in front, but found them so nasty that it soon became necessary to turn off to the left (west). There I emerged on a very long, straight slope of volcanic stones, fragments of trachyte, basalt, amygdaloid, and so forth, lying at so high an angle (probably over thirty-three degrees) that they were often rolling down of themselves, and always gave way under the foot and hand, so that I slipped down nearly as much as I went up. It was nearly two hours' incessant toil up this bit of "screes," owing partly to its nature, but chiefly to the state of fatigue and breathlessness in which I found myself, and which was no doubt due to the thinness of the air. Having never before experienced, even on the top of Mount Rosa, any of the discomforts ascribed to this cause, I had fancied that my present sensations, which had begun in crossing the first slope of stones at a height of only 12,300 feet, were caused simply by want of training and of sleep. Now, however, when between every two steps one had to stop and gasp for breath, it was plain that the rarity of the air must be the real cause, though there was no headache, nausea, gushing of blood from the nose and ears, nor any other of those symptoms of mountain sickness on which the older travelers dilate. Oddly enough it grew no worse as I mounted; in fact, was felt rather less at 17,000 feet than at 13,000. Why this was so, or why I should have felt it so low on Ararat at all, I can not explain; the phenomena of the subject are odd altogether, and seem to deserve more study than they have received. In the Alps, for instance, there are said to be mountains, such as Mont Blanc, where these sensations are experienced far more frequently than on other hills at the same height. Doubtless there is a good deal of difference between one man's susceptibility and another's, and even be-

tween the same man's status at different times; but there seem to be also further differences in the mountains themselves, which it would be interesting to examine.

The practical question at this moment was whether with knees of lead, and gasping like a fish in a boat, I should be able to get any farther. Another element of difficulty was added by the clouds, which had now established themselves, as they usually do at this hour, a good way down from the top, and might prevent me from finding it, or at least, beguile me into a wrong track, which there would not be time to retrace so as to reach the desired goal.

This repulsive stone slope abuts at its upper extremity upon a line of magnificent black cliff, from which there were hanging several glittering icicles, two hundred feet long, frozen waterfalls, in fact, produced by the melting of the snow on a snow-slope behind. Before reaching this, I had grown so weary of the loose stones, up which it was difficult to advance except by a succession of spurts with the aid of hands and ice-axe, as to turn still farther to the left, and get on to another rock-rib, composed of toppling crags of lava, along whose farther or western side—the *arête* itself being too much broken—it was possible to work one's laborious way over the fallen masses. Here a grand sight, perhaps the grandest on the whole mountain, presented itself. At my foot was a deep, narrow, impassable gully, a sort of gigantic *couloir*, in whose bottom snow lay, where the inclination was not too steep. Beyond it a line of rocky towers, red, grim, and terrible, ran right up toward the summit, its upper end lost in the clouds, through which, as at intervals they broke or shifted, one could descry, far, far above, a wilderness of snow. Had a Kurd ever wandered so far he might have taken this for the palace of the Jinn.

This gully is, no doubt, one of those ancient volcanic fissures with which the

mountain is seamed, and from which great part of its lava has been discharged. The same phenomenon appears in most volcanic regions; in Iceland, for instance, tremendous eruptions have taken place from similar rifts or *gjár*, as they are called there, opening on the sides or even at the base of a mountain. This particular fissure, which runs north-west and south-east, is, on the main, the axis of the mass, midway between the craters of Kip Ghöll on the north-west and Little Ararat on the south-east, and indicates the line along which the volcanic forces acted most powerfully. Following its course towards the base of the cone, I could see that line prolonged in a series of small cones and craters along the top of the ridge which connects Great and Little Ararat. Some of those craters, into which I looked straight down from this point, were as perfect as if their fires had but just cooled, each basin-shaped hollow surrounded by a rim of miniature black cliffs with heaps of ashes and scoræ piled on their sides. In the bottom of one or two water had gathered in greenish tarns or pools.

Not knowing how far the ridge I was following might continue passable, I was obliged to stop frequently to survey the rocks above, and erect little piles of stones to mark the way. Keeping mostly on the south-western side of this same rock-rib, and mounting at last to the top of it, I found myself on the edge of a precipice, which stopped further progress in that direction. From this precipice, the summit, or at least the place where it must lie, since there was a great deal of cloud about in these higher regions, could be made out, barely one thousand feet above me. Retracing my steps a little, and climbing along the border of a treacherous little ice-slope, I got into a great snow basin, just where the gully or fissure I have already mentioned descends from it, and attacked the friable rocks. Their angle (38 to 43 degrees) would have made them simple enough if they had only been firm, but they were so rotten that neither hands nor feet could get firm hold, and I slipped down and scrambled up and floundered about pitifully, having no longer

steel enough in the muscles for a rush. Among these rocks I was saluted by a violent sulphurous smell, much like that of a battery of cannon just fired off, and perceived at the same time patches of whitish and reddish-yellow stuff efflorescing from the ground, reminding me of similar deposits noticed on Hecla and the half-extinct volcano of Krabla in Iceland. This was delightfully volcanic, and I began to look about for some trace of an eruptive vent, or at least for hot vapors betraying the presence of subterranean fires. Nothing of the kind, however, was to be seen. The shape of this basin makes it probable that it was really a former seat of volcanic action; but the smell and efflorescences are no doubt due—as Abich, who (as I afterwards learnt) had observed them, remarks—to the natural decomposition of the trachytic rock, which is full of minute crystals of iron pyrites (sulphide of iron). This, in disintegrating under the moisture of these heights, gives off sulphuric acid gas, whence the smell, and combines with the lime and alumina present in the feldspar of the same rock to form sulphates of lime and alumina, mixed with more or less sulphate of iron or chloride of iron, which gives the reddish or yellow hue. Lumps of these and other minerals are seen lying about; I found one, a piece of gypsum, with handsome crystals, on the surface of the snow close to the top. Abich further suggests that the process of chemical change which goes on so briskly here may be one cause of the freedom of those rocks from snow. Not only is some heat involved in the decomposing process, but the sulphates thereby formed themselves act as solvents, just as common salt does when you sprinkle it on an ice-covered door-step.

Clouds covered the farther side of the great snow basin, and were seething like waves about the savage pinnacles, the towers of the Jinn palace, which guard its lower margin, and past which my upward path had lain. With mists to the left and above, and a range of black precipices cutting off all view to the right, there came a vehement sense of isolation and solitude,

and I began to understand better the awe with which the mountain silence inspires the Kurdish shepherds. Overhead the sky had turned from dark-blue to an intense bright green, a color whose strangeness seemed to add to the weird terror of the scene. It wanted barely an hour to the time when I had resolved to turn back; and as I struggled up the crumbling rocks, trying now to right and now to left, where the foothold looked a little firmer, I doubted whether there was strength enough left to carry me an hour higher.

At length the rock-slope came suddenly to an end, and I stepped out upon the almost level snow at the top of it, coming at the same time into the clouds, which naturally clung to the colder surfaces. A violent west wind was blowing, and the temperature must have been low, for a big icicle enveloped the lower half of my face, and did not melt till I got to the bottom of the cone, four hours afterwards.

In the mist, which was now thick, the eye could pierce only some thirty yards ahead; so I walked on over the snow five or six minutes, following the rise of its surface, which was gentle, and fancying there might still be a good long way to go. To mark the backward track, I trailed the point of the ice-ax along behind me in the soft snow, for there was no longer any landmark; all was cloud on every side. Suddenly, to my astonishment, the ground began to fall away to the north; I stopped; a puff of wind drove off the mists on one side, the opposite side to that by which I had come, and showed the Araxes plain at an abysmal depth below. It was the top of Ararat.

Two or three minutes afterwards another blast cleared the air a little to the west, which had hitherto been perfectly thick, disclosing a small snow valley, and beyond it, a quarter of a mile off, another top, looking about the same height as the one I stood on. Remembering, what I had strangely forgotten on the way up, that there are two tops—one sees them distinctly from Erivan and Aralykh—I ran down the steep, soft sides of the snow valley, across it in the teeth of the blast, and up the easy acclivity

to the other top, reaching it at a quarter past two, P. M. It is certainly the higher of the two, but the difference is not great, only some thirty feet or so.* Both tops are gently-sloping domes or broad convex hummocks of snow, on which there is not a trace of rock, nor a trace of the crosses which first Parrot, and afterwards Chodzko, set up, just as little as of Noah's ship itself. One thought of the pictures of childhood, the Ark resting on a smooth round grassy eminence, from which the waters are receding, while the patriarch looks out of the window, and compared them with this snow-filled hollow, just large enough to have held the vessel comfortably, raised fifteen thousand feet above the surrounding country. Neither is there any sign of a crater. You might describe the whole top as a triangular, undulating plain, of a few acres extent, descending gently on the north-west, with extensive terraces like fields of *névé*, less gently towards the north-north-east, but steeply on all other sides, and on the east breaking off, after a short snow-field, in the tremendous precipices that overhang the chasm of Arguri. There was nothing about it to suggest an extinct volcano, were it not known to be one. But in the ages that have elapsed since the time when eruptions took place from the great central chimney of the dome, a time probably far more remote than when the minor cones that stud the flanks of the mountain were active; all sorts of changes may have taken place, and the summit we now see may be merely the bottom of an ancient crater, whose craggy rim has been altogether broken away. Looking around, it was hard to imagine that volcanic fires had ever raged on such a spot, robed as it now is in perpetual Winter.

Immensurably extensive and grand as the view was, it was also strangely indefinite. Every mountaineer knows that the highest views are seldom the finest; and here was one so high that the distinctions of hill and valley in the landscape were almost lost. Ararat towers so over all his neighbors, much more than Mont Blanc or even El-

* The summit is 17,000 feet above the sea, and the lower limit of perpetual snow averages 14,000 feet.

bruz do over theirs, that they seem mere hillocks on a uniform flat. The only rivals are in the Caucasus, which one can just make out all along the northern sky. Kazbek and Elbruz, the latter two hundred and eighty miles away, are visible, but I could not be sure that I saw them, for the sky was not very clear in that direction. More distinct were the mountains of Daghestan, rising one hundred and fifty miles off, over the nearer ones that engirdle the Goktcha Lake, a little bit of whose shining levels appeared. Beyond the dreary red-brown mountains of the Karabagh one strained to discover a line that might be the Caspian or the plain of the lower Kur, but of course at such a distance (two hundred and sixty miles) it would be impossible to distinguish a sea-surface. The Caspian is, however, within the horizon; there are even stories of mariners who, sailing on it, have been able to make out the white cone of Ararat. Nearer at hand, only forty miles to the north, rose the huge extinct volcano of Ala Göz, with its three sharp black rocky peaks enclosing an ancient crater, in whose bottom were patches of snow; and, nearer still, the dim plain of Erivan encircled the mountain to the north and east, with the Araxes winding like a faint streak of silver through it. Looking due west, the extreme ranges of Taurus, mingling with the Bingöl Dag in the neighborhood of Erzerum, were hidden by the clouds which the wind kept driving up; but north-west the upper valley of the Araxes could be traced as far as Ani, once the capital of the Armenian kingdom, and the great Russian fortress of Alexandropol, and the hills of Kars. To the south and south-west the eye ranged over a wilderness of bare red-brown mountains, their sides seamed by Winter torrents that showed in the distance like dark lines, not a tree, nor a patch of green on their scorched and arid slopes, scarcely even a fleck of snow on their tops, though many rose more than ten thousand or eleven thousand feet above the sea. More than two hundred miles away I could just descry the faint blue tops of the Assyrian mountains of Southern Kurd-

istan, the Qardu land, where Chaldee tradition places the fragments of the Ark, mountains that look down on Mosul and those huge mounds of Nineveh by which Tigris flows. Below and around, included in this single view, seemed to lie the whole cradle of the human race, from Mesopotamia in the south to the great wall of the Caucasus that covered the northern horizon, the boundary for so many ages of the civilized world. If it was indeed here that man first set foot again on the unpeopled earth, one could imagine how the great dispersion went as the races spread themselves from these sacred heights along the course of the great rivers down to the Black and Caspian Seas, and over the Assyrian plain to the shores of the Southern Ocean, whence they were wafted away to other continents and isles. No more imposing center of the world could be imagined. In the valley of the Araxes beneath, the valley which Armenian legend had selected as the seat of Paradise, the valley that has been for three thousand years the high-road for armies, the scene of so much slaughter and misery, there lay two spots which seemed to mark the first and the latest points of authentic history. One, right below me, was the ruined Artaxata, built, as the tale goes, by Hannibal, and stormed by the legions of Lucullus. The other, far to the north-west, was the hollow under the hills in which lies the fortress of Kars, where our countrymen fought in 1854, and where the flames of war were so soon again to be lighted.

Yet how trivial history, and man the maker of history, seemed. This is the spot which he reveres as the supposed scene of his creation and his preservation from the destroying waters, a land where he has lived and labored and died ever since his records begin, and during ages from which no record is left. Dynasty after dynasty has reared its palaces, faith after faith its temples, upon this plain; cities have risen and fallen and risen again in the long struggle of civilization against the hordes of barbarism. But of all these works of human pomp and skill, not one can be discerned from this height. The landscape is now what it was before

man crept forth on the earth; the mountains stand about the valleys as they stood when the volcanic fires that piled them up were long ago extinguished. Nature sits enthroned, serenely calm, upon this hoary pinnacle, and speaks to her children only in the storm and earthquake that level their dwellings in the dust. As says the Persian poet:

"When you and I behind the veil are passed,
O but the long, long while the world shall last,
Which of our coming and departure heeds
As the Seven Seas should heed a pebble's cast."

Yet even the mountains change and decay. "Of old hast thou laid the foundations of the earth: and the heavens are the work of Thy hands. They shall perish, but Thou shalt endure: they all shall wax old as doth a garment; and as a vesture shalt Thou change them, and they shall be changed: but Thou art the same, and thy years fail not."

Withal I am bound to say that the view, spite of the associations it evoked, spite of the impression of awe and mystery it gave, was not beautiful or splendid, but rather stern, grim, and monotonous. The softer colors of the landscape seemed to be lost; the mountains, seen from above, and seldom showing well-marked peaks, were uncouth, rough-hewn masses. One had a sense of vast sterility and dreariness. Then, suddenly, while the eye was still unsatisfied with gazing, the curtain of mists closed round again, and I was left alone in this little plain of snow, white, silent, and desolate, with a vividly bright green sky above it and a wild west wind whistling across it, clouds girding it in, and ever and anon through the clouds glimpses of far-stretching valleys and mountains away to the world's end.

The awe that fell upon me with this sense of utter loneliness made time pass unnoticed; and I might have lingered long in a sort of dream had not the piercing cold that thrilled through every limb recalled me to a sense of the risks delay might involve. So I ran down the easy slope into the little valley between the two tops, climbed the snow wall

of the eastern one, and followed the marks made by my ice-ax in the snow back to the spot where I had left the rocks. At last I reached the upper end of the great fissure of eruption, along whose eastern side I had climbed in the morning. Surveying the declivity below me from the top of this rock-rib, it seemed possible to descend by a route considerably shorter. I pursued a south-eastward course towards the spot where my friend and the Cossacks had halted. By this time the sun had got behind the south-western side of the mountain, and his gigantic shadow had already fallen across the great Araxes plain below, while the red mountains of Media, far to the south-east, still glowed redder than ever, then turned swiftly to a splendid purple in the dying light.

Quickening my pace as the risk of missing the encampment became greater, I caught sight at last of two Cossacks loitering on the edge of the slope of sand and gravel which had proved so fatiguing in the morning, and after awhile made them hear my shouts. When I reached them it was six o'clock; and though at this height (12,200 feet) there was still good twilight, Aralykh and the ruins of Artaxata below lay already shrouded in gloom. Twenty-five minutes' more walking brought us to the place where the Kurds and the other Cossacks had bivouacked; and here, when it was already so dark that we could barely recognize one another a few yards off, my friend came forward and met me.

Two days later I found myself at the Armenian monastery of Etchmiadzin, near the northern foot of Ararat, and was presented to the archimandrite who rules that illustrious house. It came out in conversation that we had been on the mountain, and the Armenian gentleman who was acting as interpreter turned to the archimandrite and said: "This Englishman says he has ascended to the top of Massis" (Ararat). The venerable man smiled sweetly. "No," he replied, "that can not be. No one has ever been there. It is impossible."

ABEL STEVENS AS A WRITER.

IN the April (1877) number of the *Methodist Quarterly Review* is an article from the pen of Dr. Abel Stevens on "Lord Macaulay." In reply to our commendation of that article some time after it appeared a brother minister remarked, "It is not what it ought to have been." This revived the impression I had received on several occasions when reading the productions of the gifted author, and it started a train of thought which I now venture to commit to writing.

Dr. Stevens is known to the Church and literary public as preacher, theologian, historian, and journalist. As preacher he ranks high among pulpit orators—though, no doubt, his influence and fame in this department would have been more striking but for his literary pursuits—for, although he has preached as occasions have required, he has not usually had charge of a congregation, nor made preaching his chief business.

After a decidedly brilliant career as a preacher about Boston, beginning before he reached his maturity and continuing through several years, he became the editor of *Zion's Herald*, then an independent Methodist paper published in Boston; and as such he stood in the front of his profession. For boldness and versatility and the characteristics of a progressive thinker, he was scarcely equaled in all the land. He was much younger, but the official contemporary of the elder Dr. Bond, who edited the *Old Official*, and who pronounced Dr. Stevens to be an able editor, if not the ablest editor of the day—and it did seem, as fond of controversy as the "old doctor" was—and master of the situation as he usually found himself, he evidently avoided dispute with his younger *confrère* of the quill and tripod. In 1852 he was elected editor of the *National Magazine*, which was conducted with ability; but for causes no way attributable, I believe, to editorial inefficiency, the career of the magazine was of short duration. As its editor, however, his reputation was sustained more from prestige than

for any new development of power. And the same, I think, may be said of his relation to the *Christian Advocate*, the editorial chair of which he afterwards filled. In this position he did not seem to enjoy the freedom that marked his earlier editorial work, and though he evinced ability it was without any such perceptible increase of force as his experience might have guaranteed and the position was calculated to call forth.

Here it was thought that his journalistic ability would find a fair field for achievement. Probably during this period his wider literary studies were extensive and occupied, and more or less divided his attention. He was engaged in so many great things at the same time, each of which required all his powers, he rather expanded his strength than concentrated it on a single point. Napoleon, it is said, defeated armies by dividing them so that each detail felt the whole force of his genius and his battalions in the single onslaught. Dr. Stevens, in his sphere, was adequate to the same success. One instance will show his capacity to measure up to the demands of great occasions. During his earlier career, and especially while editor of *Zion's Herald*, he was recognized as an anti-slavery leader, but at the General Conference of 1856 (in Indianapolis), when the slavery question came prominently before that body, he was found on the "conservative" side, and the speech, made in the debate on that occasion, will constitute a distinctive point in his history.

He had just returned from abroad in time to take part in the controversy. He was laboring at the time under some indisposition that affected his vocal powers; fortunately he had his speech written, and it was read by Dr. McClintock, and it was thought that it lost nothing by the delivery. A constitutional question was involved, and the vote was determined against the wishes of the majority, candor having constrained a sufficient number to respect the logic of law and truth, and the question was decided in favor of the "conservatives." The result, it

was confessed, was due to the ability of Dr. Stevens's speech. It was not more than might have been expected, but thenceforth he was no longer looked to as a leader of the progressive party, with which, in fact, he had parted some years before. It was at this General Conference that he was elected editor of the *Christian Advocate*, which position he accepted and honored.

But here it must be conceded he did not measure up to the expectations of his admirers and friends. This may be accounted for by the fact already mentioned that he was too busy with general literature and chiefly with his great history to give due and undivided attention to his editorial work. As a proof of this I remember a remark he made at the time. In declaring his opinion in opposition to some writers' views, he said controversy was out of the question, his engagements would not allow it. We may, perhaps, explain the case by saying that he was so accustomed to editorial work and had so well established his reputation therein, that contrary to the usual tendency in such cases, the incentive to special effort ceased to affect him; with the preparation of a great history on his hands editorial business fell to a subordinate place, and he performed it as a work of pastime or rather of routine. I read two of his earlier works years ago. The one on "Memorials of Methodism in New England," was well written, as a preliminary local history, and served as a preparatory training for the greater task of writing his "Methodist Movement." The other work was on "Methodist Polity." It was sufficiently interesting, but could not hold its place as a standard ecclesiastical text-book to a denomination whose régime was subject to periodical revision. Accordingly when Dr. Stevens found himself face to face with the "lay delegation" question, he was called to address himself to the task of reconciling his earlier published views with the new order of things, or rather he was required by his new position to repudiate what he had before written. He favored the new movement, and, not as in the slavery controversy, he was found with the winning side.

Dr. Stevens's great work is undoubtedly his "History of Methodism." It fairly deserves to be called a great work, and it is no fulsome compliment to find its author compared as a historian to Macaulay. Here, it may be said in passing, in my judgment Macaulay's essays are superior to his history; that is, they display closer thought, keener analysis, clearer logic, and deeper philosophy; while Dr. Stevens's history excels his other works. And, not to disparage this work, I do not hesitate to say it is not equal to what the writer could have made it. While this may seem to undervalue the history, it does, in fact, confer eulogy on the capacity of its author. To put the matter in another form, as ably written as it is, the author was capable of making it greater. To make a comparison, it may be said, in reading Macaulay's works we are persuaded that he has done his best; there seems to be no room for improvement—the subject is exhausted, and the author's strength has reached its utmost. While Dr. Stevens evidently makes the impression that he has a reserved force which might have been called into requisition, and the regret one feels is that the writer did not think it necessary to put it forth.

Nor does it appear as if the subject were exhausted. The theme was surely a great one, and in it the author was at home; he belonged to the army whose campaigns and victories he describes. All the enthusiasm of his nature ought to have been enlisted; the sweep of the "movement" had proportions of grandeur; all its details were replete with the chivalry of evangelism. There was every thing to carry even an ordinary mind beyond itself, and invest it with a power borrowed from the theme. Surely in such a case one so gifted would not be expected to flag. But there appears this phenomenon, if such it may be called: the zest of collecting and recording the individuals and events of the narrative—for the joy the occupation affords, rather than to construct an ideal of history for other people's benefit, held the writer under a spell. If Dr. Stevens, out of the materials he gathered, constructed a beautiful yacht, it was not be-

cause materials were wanting, or his skill was unequal to the building of an ocean steamer with the power of a thousand leviathans, and with accommodations comparable to an Eastern palace. In reading Dr. Stevens you are always interested in a high degree, he entertains as well instructs you; but however much you may be carried away with his work, you feel an equal interest in the writer; a fellowship with him is more closely established than with what he writes. He himself rather than what he describes is your ideal. You have no misgiving as to his capacity; to the contrary, your confidence is extreme, and you indulge the wish that you could see the superior power with which you credit him displayed more fully in his work.

These reflections rose in my mind on hearing the remark of the friend mentioned at the beginning of this article. A writer who makes Lord Macaulay his theme gives intimation in so doing that you may expect something. It indicates conscious ability. Men of small capacity may wisely hesitate to attempt great things; but genius measures its powers by some noble undertaking. Lord Macaulay is a subject worthy Dr. Stevens's pen. Alexander the Great was ready to enter the Grecian games provided kings would be his competitors. Surely the English baron, in rank of intellect, was a fitting match for the Methodist divine; and the article that Dr. Stevens wrote on the great essayist and historian would be no disparagement to the authorship of Macaulay himself. Still it does not equal the greatness of the subject on the one hand or the talents of the writer on the other. And I may add if Macaulay could have been called upon to write an essay on one the counterpart of himself it would have surpassed Dr. Stevens's article. When we read any of Lord Macaulay's works we are satisfied with his performance—our expectations are rather surpassed than otherwise.

Albert Barnes, in his introduction to an edition of Butler's "Analogy," used a comparison something like this: "It reminds me of some great architectural structure begun in the dark ages and left unfinished, and no

one has since had the temerity or capacity to attempt its completion." The case may stand thus: Macaulay finished what he began, and his work is the admiration of the world; Dr. Stevens's work is great, but not a sufficient specimen of his own power. Few, if any, of Dr. Stevens's contemporaries could have produced as good an article as that furnished by him in the *Quarterly*. And while every one who reads that article will no doubt pronounce a verdict of favor, yet here and there will be found one to agree with the criticism suggested by this paper. And in reading the article I have not escaped the usual impression that the author was under some restraint or constraint, as if his collection of materials was incomplete, or he was wanting in the opportunity to adjust them, or as if another engagement was waiting his attention for which he must hurry to get through with the performance on hand. But it must be said that Dr. Stevens has had physical difficulties to contend with. Some care of his health has all along been necessary, so that he could not give undivided attention to any one subject. While writing his "History of Methodism," his great work, many other literary and clerical duties occupied his time and taxed his powers. And no doubt the article on Lord Macaulay was wrought out in intervals between other responsibilities and higher duties.

During the whole period while performing journalistic and literary labors Dr. Stevens has fulfilled his calling as a minister of the Gospel, and although he may have been relieved from the regular pastorate, yet he has had certain ministerial engagements to perform, which, for the most part, were sufficient to occupy the powers of any living man. He has been one of the editorial correspondents of *The Methodist* from the beginning, and furnished able papers to various other periodicals.

The doctor's present visit to and residence in Europe, I believe, is chiefly for sanitary purposes, and it is a pleasure to have understood that his health is improving. He has been in charge of the American chapel in Paris, and is now performing a similar work in Geneva, thus combining ministerial duties

with literary labors. Dr. Stevens is only in the prime of life—old age is yet on the distant slopes—and it is to be hoped that he may be spared many years yet to exercise

those extraordinary gifts of speaking and writing that have made his career thus far so brilliant, and influential for the Master's glory, for Methodism, and for mankind.

THE OIL REGION OF PENNSYLVANIA.

THE existence of a peculiar kind of mineral oil in Venango County, Pennsylvania, has been known since the first settlement of that country. The hunters and early pioneers first heard of it from the Indians, who, from time immemorial, according to their traditions, were accustomed to resort at stated seasons to this valley to obtain supplies of oil for medicinal purposes. The work of procuring it was begun and concluded with religious ceremonies.

The careful scrutiny to which this portion of the country has been recently subjected furnishes ample evidence that the oleaginous product of this valley was known to, and utilized by, a race of people who inhabited this region anterior to its occupation by the red men—men of a higher civilization and possessed of greater mechanical skill and more industrious than ever were any of the known Indian tribes of North America. Throughout the valley of Oil Creek are found evidences of these ancient operations. Over sections embracing hundreds of acres great numbers of pits or wells are found to have been excavated, evidently with great care and with one design. These pits are of various shapes and sizes, their sides cribbed up with timbers to preserve their original form and to prevent the soft earth from falling in and filling up the excavations. The timber was stripped of its bark, halved, and either set up vertically in the pits or extended horizontally along the sides in layers, and rudely joined at the corners. The petroleum has thoroughly saturated these timbers, and thus effectually preserved them from decay. The fact that these pits are found only in the oil regions and in connection with the oil deposits, affords unmistakable evidence that they were

designed for securing supplies of oil. Their antiquity is proved by the fact that they have become filled up with mud and sediment and the *débris* of the luxuriant forests which have every-where sprung up around them; and trees have been found growing in some of them which, judging from their concentric rings, appear to be from two to three hundred years old. The cessation of active operations by these early oil-operators seems to have been not less than four or five hundred years ago. The Indians who formerly inhabited these regions could give no account of their origin or of the people who excavated them. Probably they are the work of a primitive people who inhabited this portion of the country previous to the advent of the Indians, kindred to, or identical with, the mound-builders of the West, and with those who wrought in the copper-mines of the Lake Superior regions.

The earliest white settlers in the valley of Oil Creek esteemed the oil for its medicinal qualities, which they had learned from the Indians, and which they used for sprains, cuts, bruises, and wounds of all sorts, and also took it internally as a remedy for various internal disorders. The oil oozed from the marshy places along the banks of the creek or bubbled up through fissures of the rock in springs and brooks in dark globules, and floated on the surface as a scum of a dirty brown color, or spread out into a thin iridescent film, every-where making its presence manifest by its peculiar odor. It was collected in small quantities in pits two or three feet deep, in which the oil and water would collect together until a thick scum of oil would form on the surface of the water. Then a coarse blanket or piece of flannel was thrown over it. The blanket or flannel

soon became saturated with the oil, but rejected the water, when it was taken out and wrung into a tub or barrel, and the operation was repeated as soon as a sufficient stratum of oil was again formed on the water. The amount of oil gathered by this tedious method was small, but quite equal to the demand. It was put up in small bottles and sold as a sovereign remedy for the many "ills that flesh is heir to," under the name of Petroleum, Seneca oil, Rock oil, and other similar appellations. The first shipment of oil in bulk was made to Pittsburg by one of the early settlers in the valley, who was more enterprising than his neighbors. The cargo consisted of two five-gallon kegs, slung on each side of a horse, and thus conveyed by land a distance of nearly one hundred miles. From such humble beginnings did the present extensive operations in oil take their rise, and the traffic in this commodity has gradually increased until it has now become one of the most gigantic business interests of the world.

From the time this oil first appeared in the market as a commodity it excited great curiosity and attracted considerable attention, and was carefully analyzed by some of our most eminent chemists. The elder Professor Silliman, of Yale College, visited one of the principal oil springs in 1833, and wrote an account of the strange phenomena he there beheld, which was published in the *American Journal of Science* during that year. But as the demand for the product of these fountains of oil was small, no immediate effort was made to develop the resources of this wonderful region, which has since attracted so much attention and has added so largely to the wealth of the country.

The first impulse toward the development of the oil region arose from the following circumstances. The wonderful enlargement of the volume of business which resulted from the introduction of steam as a factor in all the great industries of the world, was accompanied by a corresponding increase in the demand for oleaginous products. About twenty-five years since, in order to meet this demand for oil, artificial oils began to be manufactured in large quantities from

various minerals, chiefly cannel coal and the bituminous shales which are found in great profusion in the coal regions of the country, and from albertite, a peculiar bituminous substance found mainly in New Brunswick. The oil obtained from these substances by distillation was used for mechanical and illuminating purposes as a substitute for sperm and other animal oils, which, on account of the largely increased consumption of these articles, began to be very expensive. By chemical analysis it was ascertained that the oil which spontaneously bubbled up through the cliffs of the rocks in the numerous oil springs of Western Pennsylvania was of the same character as the artificial oils produced by distillation and of equal commercial value. This discovery at once directed the attention of business men to the localities where this oil was produced.

The first practical movement for the development of the oil of this territory was made in 1854 by Messrs. Eveleth & Bissell, of New York, who secured by purchase or lease the territory where the principal oil springs were found. They then organized a joint stock company styled the Pennsylvania Rock Oil Company, and immediately set to work to test the resources of their newly-acquired possessions. Pits and vats were dug, and the oil and water was pumped from the springs into these by water power. This plan, which was continued till 1857, was slow and tedious and did not prove as remunerative as was anticipated. During this year the company determined to sink an artesian well in their territory, having conceived the idea that they would thus be able to reach the fountains of oil of which the springs were the apparent outlets. Accordingly Colonel E. L. Drake was selected by the company for this undertaking, who commenced operations in the Winter of 1858-9, near the upper oil springs in the northern part of Venango County, about two miles from Titusville. The project was deemed visionary by the inhabitants of the valley, among whom the announcement of the intention to bore into the earth, or rather into the solid rock, in search of oil,

was an occasion for mirth and ridicule. The operation was difficult and tedious, as the company was not in possession of the requisite machinery for such an undertaking, which at that time was costly and hard to procure, and the well was "kicked down" with the old-fashioned spring pole and stirrup. But in spite of all these discouragements the work went steadily but slowly forward, and August, 1859, at the depth of about seventy feet, the drill sank into the crevice of the rock and the fountain of oil was really reached. As soon as the drill was withdrawn from the well the oil and water rose nearly to the surface. The well was tubed and by means of a common hand-pump yielded ten barrels of oil per day. The yield was soon increased to forty barrels per day by means of a more powerful pump worked by a small engine. The well at once became a great center of attraction. Crowds of people, drawn by the news of a fountain of oil flowing out of the solid rock, came daily from the surrounding country to witness the wonderful phenomenon. The oil sold at the well for fifty cents a gallon, so that the production amounted to eight hundred dollars a day, a handsome income to its fortunate owners.

The success of this venture demonstrated that numerous reservoirs of oil, which had been giving hints of their existence in the springs and upon the streams of the vicinity, existed in the rocks beneath; and that the oil could be obtained in large quantities by boring artesian wells of sufficient depth. The news of this wonderful discovery soon spread through the country. An easy and speedy road to wealth and fortune seemed now to be opened up to all; and the prospect of large gains from comparatively small investments attracted swarms of eager adventurers to the scenes of the new discovery. The throng of speculators and operators which soon flocked into the oil regions surpassed in numbers the crowds which rushed to California in the early days of the gold excitement, as this new El Dorado was nearer to the great centers of population and business; and, although as yet unpenetrated by any lines of railroad, it

was easily accessible both by land and water routes. The excitement in the valley was very great, and developments were pushed forward with great rapidity. Every one who owned land in the vicinity of the Drake Well at once made preparation to put down a well on his own account, or leased territory to others, reserving a royalty of from one-eighth to one-fourth of all oil produced.

The first wells were all stamped down with the spring-pole, but this method proved too slow for the eager operators, and steam engines were brought into use. Very soon wells were multiplied with great rapidity, and although many of them proved to be "dry holes," yet the production of oil soon exceeded the demand, and prices so declined that the business was not nearly as remunerative as at first. For a year or more after the discovery of oil, all wells drilled had to be pumped in order to secure the precious fluid, but in June, 1861, a well was sunk, which, to the astonishment of the driller and every body else, commenced flowing at the rate of two hundred and fifty barrels per day. Numerous other "gushers" speedily followed with daily productions ranging from fifteen hundred to three thousand barrels.

The excitement now became wilder than ever. Land which hitherto had been deemed worthless, or only of nominal value, now commanded fabulous prices, and found ready purchasers. Farmers who had with difficulty made "both ends meet," from year to year, suddenly found themselves millionaires. One of these oil farms, situated near Pit Hole City, in its palmy days was sold for one million three hundred thousand dollars, and was resold in a short time for one million six hundred thousand dollars. The narrow valley of Oil Creek and the contiguous country soon teemed with a busy population of excited speculators, operators, and workmen, and presented a scene of intense business activity. The country from Titusville to the mouth of Oil Creek, where Oil City now stands, assumed the appearance of one continuous city interspersed with forests of derricks while steam-engines were as numerous as cooking stoves.

Developments were soon extended in all directions along the Alleghany River and its numerous tributaries. Towns and villages sprang up as if by magic, and decayed and died, as the transient population moved on to "the front." The most notable of these flourishing but short-lived oil towns was Pit Hole City, which, in rapidity of growth, is unparalleled among the towns of America, and which, during its short career, attracted more attention, and was the scene of more excitement than any other. In May, 1865, only a single farm house was to be seen on the site of the future city. But only five months later it had a population of fifteen thousand, and was amply provided with hotels, banks, theaters, lecture-halls, churches, and other public buildings, some of them costing as high as \$80,000. But its glory faded and departed almost as suddenly as it came, and now only a few rough houses and rude shanties are left to mark the site of this once flourishing and famous city.

The rapid expansion of the oil business is unprecedented in the business history of the world. The total annual production, which in 1860 amounted to 500,000 barrels, in 1865, was not less than 2,500,000 barrels. The effect of this greatly enlarged production was for a time exceedingly disastrous to the trade. The supply greatly exceeded the demand, and prices declined to merely nominal rates, so that oil, which, at the time of its first discovery, was worth fifty cents per gallon, sold at one time for ten cents per barrel, and was a drug in the market at that. Thousands of barrels were allowed to run into the creeks or on the ground, as it would not pay the expense of marketing. But with the creation of a large foreign demand, and by reason of increased home consumption, prices again advanced to paying rates. The speculative spirit engendered by the issue and circulation of countless millions of the national currency resulted in the organization of stock companies on a vast scale for operating in oil, and an era of wild speculation set in, such as had scarcely been realized since the bursting of the South Sea Bubble.

More than one thousand of these companies were formed, and their stock found a ready sale; the public having been previously excited by flaming prospectuses, newspaper reports of the sudden and immense fortunes realized by operators in oil. The capital stock of these various companies reached the enormous sum of \$600,000,000, and was eagerly purchased by the sanguine stockholders, who hoped to realize a handsome fortune from their investments. But few of the companies ever fulfilled the expectations out of which they had grown. These investments often proved utterly worthless, much of the land purchased, and made the basis of operations being entirely destitute of oil. A general collapse occurred during the Winter of 1866-7, the companies failing one after another, leaving blasted hopes as the only possession of multitudes who had invested all their means in these delusive stocks.

After the failure of the stock companies, oil mining assumed a more permanent and business-like character. There has, since then, been much less speculation connected with it, and the element of chance has been largely eliminated. Thoughtful men began to make it a study, and soon became convinced that the oil occurred in belts or basins, the general trend of the oil belt being north-east by south-west. Recent results have proved the correctness of this theory, so that whenever any of these belts or basins become well-defined, wells can be located, so that in almost every instance oil will be obtained in paying quantities. Before this theory was advanced, only about one well in twenty proved productive of oil in remunerative quantities; but since its general acceptance the elements of risk and uncertainty in the oil business have been greatly diminished. These oil belts or basins have to be discovered by prospecting or "wild-cating," as it is called in the language of Oildom. The basins exist like pools in the rocky strata, and the belts like streams, only the oil is not supposed to flow in a current, as do streams of water on the surface. The various belts and basins thus far discovered are included in a region about

twenty miles in width, which extends from Western New York on the north, to the Ohio River on the south, in a line parallel with the Allegheny Mountains, and about fifty miles to the west of them, and is for the most part contiguous to the Allegheny River and its tributaries. This section of country, which, by general acceptance, is termed the Oil Region of Pennsylvania, contains about three thousand square miles of land, but the actual producing territory comprises but a very small portion of this vast area. These productive portions are scattered over it in an indiscriminate and irregular manner, and can only be determined by the miner's drill.

The physical conformation of this section of the country is very similar throughout its whole extent. The water courses run with swift dashing currents through narrow valleys from which rise abruptly precipitous, rocky hills, some of which, along the Allegheny River, tower up to the height of eight hundred feet, and are covered with shaggy forests from base to summit, and are surmounted with battlements of gray rocks. The landscape, as viewed from these high hills, is striking and picturesque. A vast panorama of hill and dale and hoary rocky ledges every-where greets the beholder in rich profusion; while over all hangs a delicate transparent mist, which rises day and night from the numerous water-courses flowing through these primeval forests. This great oil belt, as it is termed, although not separated into sections by any natural barriers, is technically divided into the Upper, Central, and Lower regions, or countries. The upper country comprises the counties of Warren and M'Kean. This is at present the most productive portion of Oildom. What is called the Bradford district in M'Kean County may almost literally be said to be pouring forth rivers of oil, its daily production being more than forty thousand barrels. The central region is composed of the counties of Venango and Forest, and was the scene of the earliest developments. In this portion of the territory the largest wells ever found have been obtained, some of which produced three

thousand barrels a day for months together. Oil City is the center of this region, and, indeed, may be said to be the "Hub of Oildom." The heavy lubricating oil is found only in this section, and is chiefly obtained in the vicinity of Franklin. The lower region embraces the counties of Butler, Clarion, and Armstrong. The famous Bullion district, containing one of the most prolific oil-basins ever discovered, lies in this region. Parker City, the geographical outlet, is the principal town of this section.

The oil found in this large area of country, though differing slightly in quality, has the same general characteristics. The crude oil, as it comes from the wells, is of a dark-brown color, but by reflected light it becomes a dark olive-green. It is of the consistency of thin molasses, and has a density of 822, water being 1,000. It does not thicken when exposed to the air, and in its chemical qualities it is entirely unlike the ordinary fat oils of commerce.

The depths to which wells are sunk vary greatly in the different districts. In the early years of the business they were drilled from three to eight hundred feet deep. In the lower country the average depth of well is from eleven to twelve hundred feet. But in the upper region but few paying wells have been obtained at a less depth than sixteen hundred feet, while many are nineteen hundred feet deep. Drilling tools, at first, when the wells were comparatively shallow, were of very light construction, and it was no unusual thing for a driller and his men to take their tools in their hands and start out to look for a job. But for such deep wells much heavier drilling machinery is of course necessary, so that it now requires one, and sometimes two teams, to haul the tools and machinery for the driller to the point of operation.

The life of a well, as its productive period is called, averages about five years. Some, of course, hold out much longer than this, and wells are now being pumped which have been steadily yielding oil in paying quantities for twelve or fifteen years. Such, however, are the exceptions. The production of ordinary wells gradually but slowly de-

creases until it no longer pays to pump them, or they completely dry up. The cost of sinking a well varies greatly in the different districts, according to the depth to be drilled and the character of the strata through which they pass. In the districts where the oil-bearing strata are not more than one thousand feet below the surface, the average cost of a well is about \$2,000. But in those districts where the wells are required to be sunk to the greatest depth, an ordinary well, when completed, will cost not less than \$4,000. The cost of producing oil in those districts where the wells have to be sunk to such great depths is usually less than in the territory where the wells are much shallower, as such wells flow spontaneously, and their owners are saved the cost of pumping, which is one of the most expensive items in running a well. These flowing wells are explained on the theory that gas is generated in large quantities in the oil-bearing strata, and being the lighter element, of course rises above the oil, and finding no egress, exerts an enormous pressure upon it, and thus, when the oil is reached by the drill, it is forced to the surface.

Although twenty years have elapsed since the discovery of oil in inexhaustible quantities in the recesses of the rocks, and though hundreds of wells have been sunk annually since the discovery, the origin of the fountains of oil is still an unsettled problem. A multitude of diverse theories have been advanced to account for the existence of oil in the rocky strata. One fact, however, is conceded by all; that is, that the oil is not the product of the rocks in which it is found. Petroleum is found in small quantities in stratified rocks of all the geological ages, and traces of it have even been observed in some rocks of a granitic structure; but it is only found in paying quantities in the various sandstones which in Western Pennsylvania overlie the Devonian formation. This sandstone is composed of several layers, alternating with beds of clay and other deposits, and is technically termed the first, second, third, and fourth sand, respectively. All of these sands have furnished oil in

large quantities. These oil-bearing sand-rocks are considered to be merely reservoirs, in which the oil has been collected after its formation, and to have acted as a sponge, absorbing the oil which has ascended from a much greater depth. The most tenable theory in regard to the origin of petroleum is, that it is produced from the black bituminous shales underlying these various strata of sandstone and which is very rich in organic remains. The oil is produced from these organic remains, both animal and vegetable, by slow distillation at low temperature, and has been forced upward into the substance of the sand-rocks by the pressure of the gases evolved in the process of distillation. This theory not only accounts for the existence of the oil but also of the gas which is found in abundance wherever oil is present. In the region where the wells have to be pumped, gas is largely used as fuel for the engines, and in the flowing wells it is the main factor in their continuous flow.

In the early period of the oil business producers found great difficulty in getting their oil to market. It was first put up in barrels at the wells, and then conveyed in wagons to the nearest shipping point on the river. This was a very slow process, and in wet weather the roads became almost impassable, and resembled sloughs more than public highways. Broken wagons, dead horses, and oil barrels, filled and empty, lined the roads of the oil region during the rainy seasons. After a time tightly built flat-boats closely decked over, or oil barges, as they are sometimes called, were introduced, which carried the oil in bulk from the wells along the creek to shipping points on the river, or even as far as Pittsburg. This was a cumbersome and wasteful method of transportation, and was quite unequal to the demands of the rapidly increasing business. Within a few years numerous lines of railroads were built in all directions through the oil regions, so that now the facilities for travel and traffic in this section are surpassed by no other portions of the country. These railroads, however, were necessarily confined to the valleys of the main streams. But as a great part of the oil was produced at a

distance from the line of the roads it became necessary to secure some direct and easy method for transporting it from the wells to the various shipping stations. The happy thought was conceived of transporting it through pipes, such as are used for the conveyance of water. The plan proved a success, and immediately came into favor among oil men. At first these lines were only laid for short distances, but were gradually extended until all the most important points were brought into immediate connection with the principal shipping and refining stations. As the oil does not freeze or even harden at the lowest temperature of an ordinary Winter, the pipes are laid on the surface of the ground, and are seen traversing the oil regions like arteries in all directions. The oil is propelled through the pipes by pumps of great power situated at intervals along the line, some of which will throw five thousand barrels a day a distance of from ten to fifteen miles. At the beginning of this enterprise, each separate pipe line was independent of all the rest, but as the interests of the companies controlling them were identical, they were finally consolidated under the name of the United Pipe Line Company, which now has in operation about two thousand miles of pipes for carrying oil. It is the most convenient and economical method of transporting oil yet invented; the crude product being carried from the wells to Pittsburg for five cents a barrel. A line from the oil regions to Cleveland has been surveyed, and is now in process of construction, and when finished the shipment of crude oil to that great refining center will be entirely independent of the various railroad companies.

In order to provide storage for the surplus stock of oil, this company has erected in all parts of the oil region immense iron tanks having a capacity of from fifteen to twenty-five thousand barrels each. On account of the constantly increasing production the company is continually adding to the number of its tanks, so that the storage capacity now under its control is not less than ten millions of barrels. Oil received from the wells into the company's tanks is

placed to the credit of the producer in the books of the company, and is subject to his control. An order is then issued by the company to the owner for all or any part of his credit balance upon his request, and is marked "accepted" by the company. These acceptances are usually termed "certificates" by the trade, and are bought and sold like bills of exchange, and pass from one person to another by indorsement like bank checks. The holders of these certificates are charged a monthly percentage on the market value of the oil in payment for storage.

The buying and selling of oil which used to be done at the wells, on trains, or on the corners of the streets, is now almost entirely carried on in exchanges. There are several of these oil exchanges situated in the leading towns of the different districts, the one at Oil City being the most prominent and permanent. The daily sales and re-sales of certificates or acceptances in each of the exchanges amount to many thousands of dollars, and those in the exchange at Oil City occasionally border closely on a million. On days when there is great fluctuation in the market the exchange presents a scene of the wildest confusion. The excitement becomes intense. The roaring of the "bulls," the growling of the "bears," the shrill cries of the office boys, and the wild gesticulations of the numerous buyers and sellers are more suggestive of a company of bedlamites than of men engaged in rational business. All the transactions in the exchanges are in certificates of crude oil only. The refining business, which is too tedious to describe in a short article, is monopolized almost entirely by the Standard Refining Company, whose numerous refineries are situated in the business centers in, and adjacent to, the oil regions.

Thus in a few years the oil business has grown from almost nothing to the most gigantic proportions. As an illuminator this oil is now used in every civilized land on the globe. It is one of the staple articles of commerce and ranks fourth, if, indeed, it does not stand third, among our articles of export. The production has increased to

the enormous sum of sixty thousand barrels a day, giving a total annual yield of nearly twenty-two million barrels; so that the annual product of petroleum is greater in value than the entire production of iron, and exceeds in worth the combined product of the gold and silver mines of the whole country. To carry on this immense business requires an aggregate capital of one hundred million dollars, and the various forms of industry connected with it furnish employment to at least one hundred thousand men, who, with their families are supported out of its proceeds.

Notwithstanding these wonderful facts, the oil business is at present in a very unsatisfactory condition. The supply is greatly in excess of the demand, and consequently prices have been very low, averaging less than one dollar a barrel for the past year. According to the last monthly report of the United Pipe Line Company there are in tanks not less than seven millions of barrels, and the surplus is constantly increasing.

The future of the oil business can not be easily foretold. Of the three thousand square miles comprised in the great Pennsylvania oil belt, only a very small part has as yet proved productive. The extent of territory that will yet produce oil in paying quantities can only be determined by the oil miner's drill.

Such rapid changes in the population of a considerable region of country must involve very important social and religious interests. We will speak only of the latter. Every one who is at all acquainted with the oil regions is well aware that the Methodist Church has been a most important factor in conserving its moral and religious interest during the rapid changes to which it has been subject. Previous to the discovery of oil this section was thinly inhabited. No towns of any magnitude were in existence. A number of small villages, however, had grown up about the lumber mills along the tributaries of the Alleghany River and about the furnaces, which, in the days when iron was manufactured with charcoal, were quite numerous in some parts of the lower country. But the greater

part of the inhabitants were farmers, who had located wherever it seemed possible to secure a livelihood from the thin soil. Many of them lived in primitive log houses, and were barely able to secure a subsistence for themselves and families. But these scattered villages and the secluded rural population were not overlooked or neglected by the Methodist itinerant, and the inhabitants of this region were supplied with the Gospel by the "circuit rider," who, with his saddle-bags, Bible, and hymn-book, traversed this unpromising territory in the interests of religion. The field was a hard one. Churches were few and far between, services being held for the most part in school-houses and private dwellings. These ordinary services were supplemented by the annual camp-meetings, which were the great religious event of the year, and were looked forward to with eager anticipations, and were seasons of great spiritual power and profit.

But with the discovery of oil and the consequent increase in population and wealth, Methodism took on new life, and proved equal to the occasion, and readily adapted itself to the new condition of things. The Church expanded with the new development every-where taking place. The "circuit rider" kept pace with the eager explorers and speculators, and wherever they marked out the site of a new town he procured a lot and built a church. Thus the Church has been able to take advantage of the many opportunities offered in the early days of the oil development, and as a consequence of its early occupation of this territory Methodism is now, in the aggregate, the first Church in numbers, wealth, and influence in the oil regions. The Methodist economy is especially adapted to overcome the obstacles in the way of supplying regular religious services to the transient towns which spring up with every new oil development. The circuit system makes it possible to occupy them in their incipient state and to maintain a hold on them as long as a congregation can be gathered for religious services. The Methodist preacher is usually the first minister to arrive in these newly-

founded communities, and the last to leave. His church is the one first built and is the last to close its doors, and only does so when the last family has left and the region resumes its primitive wilderness.

These church edifices, in the main, are unpretentious in style and of cheap construction, as are all other buildings in the typical oil town. But in the towns which are the centers of business, and which have assumed a permanent character, substantial and sometimes costly churches are to be found, which will compare favorably with the churches in towns of equal size in other parts of the country. Trinity Church at Oil City in convenience of arrangement, in perfectness of adaptation to all church purposes, and in tasteful elegance of adornment, is equaled by few and surpassed by none of the churches of the land. In these respects it is the typical church of the future.

Only a few of the original inhabitants now remain in the oil regions. Nearly all of them have disposed of their possessions and have migrated to other sections of the country where they are enjoying their easily acquired wealth in quiet retirement. The present dwellers in the land of oil are a heterogeneous population, gathered from all parts of the country, representing almost every State in the Union, and also many parts of the Old World. Although drawn

together from such distant and dissimilar quarters, they are rendered homogeneous by their common pursuits and interests, and hence are not characterized by any sectional peculiarities such as serve to distinguish the inhabitants of the different sections of our own and other countries. Being freed from all sectional eccentricities by this commingling and intermingling of international customs and habits, we know of no part of our country where the representative American is so likely to be developed as in the oil regions.

As a necessary consequence of the requirements of the oil business, the people of this region are characterized by shrewdness, intelligence, and untiring activity and perseverance. No other class of people could cope with the formidable difficulties or prove themselves equal to the trying emergencies which are concurrent with the various branches of this business. In every congregation, even in the smaller towns of this section, persons equal in refinement and culture to any met with in the principal cities of the land are to be found; while the masses of the communities are much above the average in intelligence and tact. The men of wealth are notable for their generosity and benevolence; and all alike are distinguished for a hearty friendliness rarely manifested elsewhere.

A COUNTRY PASTOR'S LIFE.

THE toils and sacrifices incident to the sacred calling of the ministry have so often been paraded before the world that the impression sometimes obtains that there is nothing in such a life but sacrifice. Such representation betrays an undue appreciation of blessings which are purely outer and temporal, and ignores or regards as of trifling value others which are far higher and really desirable. As respects dollars and cents, independence of action, and freedom from care, the occupation of the merchant, and the professions of law and medicine outrank that

of the ministry. But with respect to opportunities for accomplishing real good, for securing the lasting esteem of men, the approval of one's own conscience, and the smiles of God—blessings which are really the highest the world has to offer—the calling of the ministry takes precedence over every other.

There is that in the very occupation of the minister which brings him peculiar regard. He is the representative of the unseen and the eternal. He is in some sense the mouthpiece of the Almighty. He deals

with sacred things. He is the authorized interpreter of a sacred book. He is supposed to know all that can be known of death and the hereafter, and to be able to give those who journey that way such advice as they need. For this reason the homage which is paid to the "men of the sacred cord" along the Ganges, or to the medicine men of the North Platte, or to the bare-headed and bare-footed bonzes of Thibet, is freely accorded to the minister by the more enlightened society of Christian lands. And so long as men die, and death remains the next great event after birth, so long as there are mysteries and unfathomable depths in the direction of God and spiritual things, so long some order of men who minister in sacred things will be held in high esteem. It is the ambition of some spiritual leaders to remove every trace of a sacred avocation from their person or calling. They reject the title of reverend, and seek to obliterate every mark of distinction between themselves and the man of business. Certainly the title or the "tie" or the cut of the cloth will never cause reverence for the ministry, but when in more important matters the minister becomes "like another man," and his calling degenerates into a mere business, the special regard in which he has been held ceases, and a chief element of his power is gone.

There is that in men also which leads them to respect *goodness*, wherever they find it. They instinctively yield homage to it, whether it be the crowd of noisy rioters who give way to a well-known horse and phaeton, driven by one whom all know and many love, or the natives of that rebellious Indian province who, compelled to enter into negotiations with the English Government, dispatch messengers, saying: "Send us none of your officers, but send us the foreign teacher who lives at Tanjore. Him will we hear and trust." Such respect men of all creeds give to the Sisters of Charity, not inquiring the personal merits of each, but honoring all for what at least a few have done and been. And men of this generation insist on holding in grateful remembrance those whose lives, though long since

ended, were marked by peculiar goodness. Men of power simply may be immortalized in history, but not in the hearts of their own countrymen, much less of the world. Men of mere wealth have not succeeded in keeping their names from oblivion. But the *good* man, whether it be Socrates or Howard or Wilberforce or Knox or Washington, whether it be Dorcas or Florence Nightingale—of such men and women the world has a very tenacious memory. They have achieved by mere goodness what Ramesses hoped to do by the pyramids, or Omar by burning the Alexandrian library, or possibly J. Wilkes Booth by the killing of Lincoln. This untaught homage which men have for moral excellence the minister has arrayed on his side. He is a preacher of righteousness. He belongs to a class of men who have in marked degree, notwithstanding occasional exceptions, possessed those very qualities. As a teacher of those virtues, and as a representative of a class of men who have exemplified them, he can not but be held in high esteem unless he plainly proclaim by his life that though numbered among them he is not of them.

And this honor is never more heartily accorded than among the rude, half-cultured classes of the western wilds. Among the California towns, from one of which this article comes, no man is more highly respected than the minister. In the mining regions the saloon and dance-hall held their own against every thing except the preacher. The rough miner sees in the perhaps equally rough preacher one who reminds him of the old shepherd who laid his hand in blessing on his childish head, of the mother who bore him, and now looks upon him from heaven, of all the human goodness of which he has ever heard, and perhaps of Jesus, the Savior; and when the never-failing collection is taken he empties his pockets into the hat. And where this respect is not paid to the minister it is because one or more by an unworthy life has brought disrespect on the whole class.

Not the least among the desirable things of a minister's life is the fact that he works for the highest possible results. The mer-

chant seeks to accumulate wealth, but if successful, whether that wealth will be of any benefit to him or his family he can not say. It may ruin him morally. It may be the ruin of his children. The very wealth he has gathered with so much care his heirs may quarrel over and lawyers fatten upon. The lawyer may, through politics, which is given over largely to his profession, gain political eminence, but whether that will be of any real worth to him, whether he will not find that "uneasy lies the head that wears a crown," though that crown may be small, and whether he may not die regretting that he ever touched the business, and his country's regret be deeper than his ever could be, none can say. But the minister knows that the end he seeks is good, and only good. It makes for joy, and addeth no sorrow either to himself or others.

He can not but know, also, that his work is of vast importance to the community and the state. As compared with the statesman or soldier the work of the minister may seem small. To plan campaigns or administer law sounds much greater than to preach sermons or convert sinners from the error of their ways, but the former only seek to control evils which the latter aim to abolish. And it is still true

"Were half the power that fills the world with terror,
Were half the wealth bestowed on camps and courts,
Given to redeem the human mind from error,
There were no need of arsenals or forts."

So that the minister who attends simply to the work of his calling is a true patriot and philanthropist, by aiding to make unnecessary the work of the soldier, the jailor, and the judge.

The physician is justly honored in a community for the skill he is supposed to possess in arresting the progress of diseases and building up broken down systems. A peculiarity of his work is that it is largely to counteract the effects of excessive indulgence in food, intoxicating drinks, high-seasoned pleasures, and overstrained modes of life. He knows that much of the sickness which he is called to prescribe for is unnecessary, and in a right condition of things would not exist. And this shows

the work of the minister, which is to preach righteousness, temperance, chastity, conformity to the laws of nature, because they are the laws of God. So, to *prevent* what the physician seeks only to control, according to the well-established principle—

"Joy and Temperance and Repose
Slam the door on the doctor's nose."

So that the minister has no need to be ashamed of his calling even among those who look no further than the health of the community. Nor need he blush for his occupation even when what some have called the science of economics is bronched, even though he remembers the millions of dollars expended each year in the building of churches and the maintenance of schools and ministers. He has only to remember how many more millions are spent in building hospitals and jails, in securing police and constabulary regulations and judicial oversight, how much is absolutely *sunk* on the vices of men, how much strikes and riots consume, and how much war costs, to appreciate the comparative insignificance of this ounce of prevention.

Here, where most other professions end, the work of the minister really begins. His business is the culture and training of human souls, a work which poetry, sculpture, music, law, and medicine unite with religion in declaring the highest and holiest work on earth. By so much as it is the highest, by so much it is the most difficult successfully to accomplish. Preaching and pastoral visitation are easy enough, but are not necessarily to be confounded with this work. By so much as it is the most difficult work, in the same measure it is the most blessed. We do not wonder that a master-workman, sometime since, wrote, "The joy of saving souls is the most exquisite and heavenly that any heart can know this side the pearly gates and crystal river. The sweetest foretaste of joy I have ever known has been when some one has thanked me for leading him to Christ and his kingdom. I have some such letters of acknowledgment among my cherished private papers that I would not exchange for Astor's checks or autograph letters from Queen Victoria." What true

minister has not had seasons of joy growing out of even moderate success in his work, greater and purer than Wellington had after the battle of Waterloo, or Webster after an ovation in the Senate?

The peculiar relation of a minister to his people and the community in which he lives opens the way for a multitude of little joys and sympathies, which, after all, make up much of the happiness of life. His position as an unselfish seeker of the good of others wins for him the confidence of men. He is trusted as few other men. He becomes a father confessor whether he will or no, and especially must hear and bear the sorrows of the people. The spiritual among his flock unconsciously transfer a measure of their regard for the Master to the servant, and so he is often loved as few other men. All this, to a good man, is very desirable, and helps to fill his cup of happiness.

And even a very small parish is large enough to supply all a minister needs for happiness, provided he is not incapacitated for enjoying what he has by ambitious longings for something greater. It is generally the case with ministers who long for larger fields of happiness and usefulness, as with a certain great conqueror who longed for other worlds to subdue, that they have not compassed the possibilities within the fields they now have, as he had scarce begun to conquer

this world. And the question arises, when there is enough in a narrow parish to fill an angel's heart, why should a mortal make himself unhappy by longing for a larger one? Why long for Hercules's cup, when we can not drain the Macedonian goblet which we now have?

We all condemn the folly of that old king who did not think it worth while to sit down to a breakfast of less than a dozen roasted oxen, a score of pigs, a half hundred fowls, and an unlimited number of smaller game, when he himself could consume only a very little. Yet just this is what many ministers, in common with men of the world, are doing. What minister can be blind to the fact, that after even many years of residence in a community, there are yet many whose friendship, did he really know them, would be a continual joy; there are lines of influence which he has not touched, there are fountains of happiness of which both he and his people are ignorant. He has but picked up a few pebbles along the shore of the ocean, which is yet unexplored.

While the work of the minister is not without its trials, there are certain compensations which make it questionable whether he is deserving of special pity; and which, if duly pondered, would lead many to pause before the door of the Church before they made final choice of a calling.

DESCENDING.

O STREAM descending to the sea,
Thy mossy banks between
The flow'rets blow, the grasses grow,
The leafy trees are green.

In garden plots the children play,
The fields the laborers till,
And houses stand on either hand,
And thou descendest still.

O life descending into death,
Our waking eyes behold
Parent and friend thy lapse attend,
Companions young and old.

Strong purposes our minds possess,
Our hearts' affections fill;
We toil and earn, we seek and learn,
And thou descendest still.

O end to which our currents tend,
Inevitable sea
To which we flow, what do we know,
What shall we guess of thee?

A roar we hear upon thy shore,
As we our course fulfill;
Scarce we divine a sun will shine
And be above us all.

WEEDS.

IT is the law of nature that plants should be diffused as widely as possible wherever the circumstances are favorable for their growth and welfare. For this purpose they are provided with the most admirable contrivances to maintain their own existence, and to propagate the species. But man interferes with this law in his processes of gardening and horticulture. His object is to cultivate beautiful or useful plants within inclosures, from which all other plants are excluded, and where an artificial soil and climate have been prepared. He wishes to separate from the struggle of the elements, and from the competition of other species, certain kinds of flowers or vegetables which are good for food or pleasant to the eye. In this he is only partially successful, for into the plot of ground which he has set apart from the waste common of nature a large number of plants intrude; and with them he has to maintain a constant warfare. These plants are known by the common name of *weeds*, a term which, curious enough, is etymologically connected with Woden or Odin, the great god of the Northern mythology, to whose worship in former ages our Wednesday, or Odinsday, was specially dedicated. Very few languages have any term equivalent to our popular word; and even science, with its strict technical definitions, takes no cognizance of the useful idea contained in it. We know of no separate treatise upon the subject; and weeds in botanical textbooks are usually merged in the ordinary flora.

As any dead matter out of place is dirt, so any plant becomes a weed by being accidentally found in a situation where its presence is not desired. But true weeds form a peculiar and distinct class. They are at once recognized by their mean and ragged appearance; their stems and foliage being neither fleshy nor leathery, but of a soft, flaccid description, and by the absence in most of them of conspicuous or beautiful blossoms. A look of vagabondage seems to

characterize most of the members of the order, which at once stamps them as belonging to a pariah class. In the vegetable kingdom they are what gypsies are in the human world, and the same mystery surrounds them which is connected with that remarkable race. Like the gypsies, they are essentially intruders and foreigners; never the native children of the soil on which they flourish. They may have come from long or short distances, but they have always been translated. There is no country where they are not found, and every-where they have to encounter the prejudices which the popular mind invariably entertains against foreigners. By the Germans a weed is contemptuously called *unkraut*, which means "no plant." In North America the native Indian calls the common plantain, which grows by roadsides and on graveled walks, "white man's foot," because it invariably follows the steps of the European. Longfellow, in his "Song of Hiawatha," thus alludes to it:

"Wheresoe'er they tread, beneath them
Springs a flower unknown among us,
Springs the 'White Man's Foot' in blossom."

The New Zealand savage calls the chickweed, which, in that country, flourishes with extraordinary luxuriance, "the Mark of the Pale Face." The yellow sorrel of the Cape has become a ubiquitous weed in Malta, where it is called "Haxixa ta l'Englisi," the English plant; while a plant like the common groundsel, introduced of late years from Peru, and one of the commonest weeds in the market gardens in the west of London, is known in the sandy districts of East Prussia, where it has become a perfect pest, as "the Frenchman's weed."

Some really fine flowers have betaken themselves to this kind of gypsy life, still retaining their original floral excellence, which, however, fails to save them from the contempt due to the class to which they have joined themselves. We have very few finer flowers than the dandelion, but because

it makes itself so common it is not appreciated. The cockle is in beauty the rival of the moss pink, but all its fine colors fail to redeem it from the odium of being reckoned a pestilent weed because it persists in intruding itself into the wheat-fields. In some parts poppies cover whole fields with their gay blossoms, and the corn-fields of America are often overrun with the climbing vines and the flaunting beauties of the morning-glories. And yet, though so gay and bright, all these are still no better than weeds; for fine talents and splendid qualities out of their place are not able to compensate for the incongruity of their positions.

There is one peculiarity about weeds which is very remarkable, namely, that they only appear on ground which, either by cultivation or for some other purpose, has been occupied by man. They are never found truly wild, in woods or hills, or uncultivated wastes far away from human dwellings. They never grow on virgin soil, where human beings have never been. No weeds exist in those parts of the earth that are uninhabited, or where man is only a passing visitant. The arctic and antarctic regions are destitute of them; and above certain limits on mountain ranges they have no representatives. There were no traces of them in New Zealand, Australia, and America when these countries were discovered, though they now abound in them. We never see the familiar weeds of our gardens and fields anywhere else except in association with our cultivated plants. The dandelion illumines our waysides with its miniature suns; and far and wide as its downy seeds may float in the air, they alight and germinate only around the dwellings of man. The chickweed and the groundsel have no home except in the garden beds; the thistle belongs to the corn-field, the sheep's-sorrel to the potato-plot, and the dock to the meadow.

To every thoughtful mind the questions must occur, "Have the plants we call weeds always been weeds? If not, what is their native country? How did they come into connection with man, and into dependence upon his labors?" No satisfactory answer

can be given to these questions. As a class there can be no doubt that weeds belong to the most recent flora of the globe. Their luxuriant and flaccid look indicates their modern origin; for the plants of the older geological ages are characterized by dry leathery leaves, and a general physiognomy like that of the existing flora of Australia. Indeed, the flora of Europe during the Eocene period bears a close resemblance to that of Australia at the present day; so that in paying a visit to our southern colony we are transporting ourselves back to the far-off ages when our own country had a climate and vegetation almost identical. The flora of Australia is the oldest flora at present existing on our globe. Our weeds came upon the scene long subsequent to this Australian or Eocene vegetation. In our own country they form part of the Germanic flora which overspread our low grounds after the passing away of the last glacial epoch, driving before them to the mountain tops the Alpine and Arctic plants, suited to a severer climate, which previously had covered the whole of Europe. They came from Western Asia and Northern Africa. They made their appearance in company with the beautiful and fruitful flora that is specially associated with the arrival of man, and spread from the same region which is supposed to be the cradle of the human race. In this way they are co-related with the Scripture account of the fall of man. "Cursed is the ground for thy sake; thorns and thistles shall it bring forth to thee," was the sentence pronounced by God upon man's sin. We are not to suppose from this circumstance that these noxious plants were specially created then and there for the express purpose of carrying out the punishment of man. They were previously in existence, though they may be said to belong very specially to the human epoch; but since that mournful event they have received a new significance, and are bound up with man in a new moral relation.

Most of our weeds possess all the characteristics of a desert flora—special adaptations to a dry soil and arid climate. The dock and the dandelion have long tap-roots,

the object of which is to store up a supply of water, enabling the plants possessing them to live through a long rainless period, and in spots from which the moisture has vanished, either by evaporation in the atmosphere or percolation through the soil. The dead-nettle is covered with silky hair, a provision made to attract the moisture of the air, and so to counteract the drought of the circumstances in which it grows; for we find that plants in moist localities are less hairy than those growing in dry, and if removed from the one to the other they have been observed to change their respective qualities to suit their change of conditions. It has been suggested that the downy seeds of the thistle and the dandelion, while their principal purpose is more effectually to diffuse the plant, are particularly related to arid conditions. It may also be noticed that a very large number of our familiar weeds have linear ragged leaves, or foliage more or less cut up into segments. This would appear to be another arrangement co-related with a dry habitat, as such leaves, approximating more in shape to hairs, would have a greater power of attracting the latent vapor of the air in arid situations than broad, fully developed leaves would possess. Plants have a tendency to produce narrower and more divided leaves according to the aridity of their place of growth. Thorns and thistles are also characteristics of a desert flora; and many of our weeds are possessed of these weapons of defense. Thorns are undeveloped branches, and prickles aborted leaf-stems; and these arrestments of growth are caused by poverty of conditions. A much larger amount of nourishment is needed for the production of leaves than for the growth of wood. We should, therefore, expect that plants growing in poor dry soil would be more remarkable for their woody than for their leafy products, would develop more spines and prickles and other woody excrescences than full-formed foliage. All these peculiarities, which distinguish more or less our native weeds, would seem to indicate that they came originally from a part of the earth less moist than our own. And the reason why they find a congenial

home in our gardens and cultivated fields is because the soil of such places is made artificially like the natural soil of their native country. Our fields and gardens are divested of all unnecessary vegetation, and drained of all superfluous moisture, and thus are possessed of the dry, warm, exposed soil, to which the provisions for drought with which weeds are specially furnished are admirably adapted, and where, in consequence, they luxuriate and overcome other plants less specially endowed. They follow in the train of man, and show a remarkable predilection for his haunts, become domesticated under his care, not merely because of the abundance of the nitrogenous and calcareous substances to be found in the vicinity of human dwellings and in manured fields and gardens, but chiefly because he provides them with the dry soil and climate in which they can best grow.

It is an essential qualification of a weed that it should grow and spread with great rapidity. For this purpose it is endowed with marvelous contrivances in the way of buds and seeds. A very large number of our weeds, such as the thistle, groundsel, dandelion, colt's-foot, camomile, daisy, ragwort are composite flowers. The apparently single blossom is in reality a colony of separate blossoms, compressed by the obliteration of their floral stems around one central axis. And this arrangement must have taken place long after the first appearance of true flowers on the earth, and may be regarded as a gradual adaptation of floral parts for more efficient propagation. Besides the economical multiplication by this method of blossoms within a small space, many composite plants have a most remarkable modification of another part of their floral system for the same purpose. The limb of the calyx of each floret in the compound blossom is reduced to a mere coronet of hairs, forming the well-known thistle-down, and the "clock of the dandelion," which country children blow away to ascertain the hour. Each seed has this downy parachute attached to it, which enables it to travel long distances from the parent plant in search of suitable soil. Gifted with such

special means of dispersion as these, we can easily understand why composite plants should form one of the largest families of the vegetable kingdom, and should be variously and extensively distributed over every quarter of the world. Every puff of wind blows off the ripened downy seeds of the dandelion and floats them far and near, so that we are not surprised that this weed should be found all through Europe and Asia, from arctic latitudes to Algeria and India, and in America from Greenland to the Straits of Magellan; being at home in Japan and New Zealand as well as in the Canary Islands, and from an altitude of eleven thousand feet to eighteen thousand feet on the Andes and Himalayas.

In most of our weeds the floral parts are small and inconspicuous. The reproductive act is so arranged as to economize material and to exhaust the vital force as little as possible, and the organs concerned in it are reduced to the simplest forms consistent with efficiency. Most of the species can be fertilized by the wind, which is always available, or by the help of insects that have a wide range of distribution and are abundant every-where. In consequence of this floral economy, the vegetative system acquires a greater predominance in this class of plants than in almost any other, so that the life of the individual is carefully preserved even amid the most untoward conditions. A weed, by reason of the strength of its vegetative system, is able to stand extremes of heat and cold, and to recover from the roughest usage. It will hold on to life in circumstances which would prove fatal to most other plants; and in this way it can abide the most favorable time for the development of its blossoms and seeds. Nay, it can propagate itself as well without blossoms as with them. Many of our weeds form long creeping stems, giving off at every joint buds which will produce perfect plants, and greatly extend the area which they occupy. No one who examines attentively the colt's-foot, one of the commonest and best-known weeds in our gardens and fields, but must be struck with the wonderful care which nature takes of

this vagrant outcast, and with the ample provision which she has made that it shall not be extirpated. It goes early to work, being one of the first flowers which the Spring calls up from the Winter's sleep, and it has thus a long time before it to carry out all its purposes. It produces its blossoms above the soil, before the leaves appear, like most Spring flowers, in conformity with the law that nature cares more for the type than for the single life, hastening, in a season of storm and change endangering the life of the species, to develop the parts essential to propagation before those necessary to the welfare of the individual. The young flower buds come up in a bent position, the involucre, a ring of small leaves at the base of the blossom, thus acting as a pent-house roof to protect it from the inclemency of the weather. The buds gradually elongate, and by the time the flower expands the stem becomes perfectly upright, so as to expose the floral organs to the sunshine of a later and more settled time. When the expanded blossom is fertilized, the involucre collapses over the young seeds, and gradually assumes the former bent attitude, in order to protect them while they are ripening, becoming again upright when the seeds are fully matured, so as to expose them freely to the air. In each head there are about five hundred seeds, and each seed is furnished with its downy parachute, which catches the smallest breath of wind, and is carried on to be sown in the soil. By the time the leaves make their appearance the seeds of the plant are shed, and the action of the hoe, that seeks to extirpate the obvious leaves, only aids in loosening the soil for the unsuspected seeds, or in scattering them over a wider surface. The roots are tough, succulent, and most tenacious of vitality, and not only creep for long distances along the ground, but penetrate beyond the depth of ordinary plowing or hoeing. They bud and branch freely, each broken fragment sending up a new shoot, so that the more they are injured by the hoe the more they spread, unless they are at once removed from the soil. With a plant so richly provided against all

contingencies, the farmer finds it most difficult to cope. When it gets a fair footing in a garden or field, it is almost impossible to eradicate it. And the colt's-foot is only one example. The quantity of seeds which they all produce is most wonderful. An average plant of shepherd's purse will yield eight hun-

dred flowers, with twenty seeds each; sixteen thousand seeds to a root. An average plant of chickweed will yield three hundred flowers, with ten seeds each; three thousand seeds to a root. This explains the great rapidity with which they will spread in favorable circumstances.

THE DIVINE GIFT OF LANGUAGE.

NOTHING is more certain and nothing is more impenetrable than the mystery that enshrouds the *milieu* wherein we are placed, the endowments wherewith we discover ourselves possessed—our entire being and all that pertains to it. We are sure of nothing, humanly speaking, and though some persons rely upon the evidence of their five senses as something infallible, the truth is, that this, in its final analysis, is as strange, as inexplicable a mystery as is all else relating to the microcosm and to the kosmos. It would appear that as compared with angelic—that is, with higher intelligences—we are relatively in much the same position or grade that the lower animal orders sustain toward ourselves. We move in our small cages, our stalls; we are capped with blinders, curbed with bit and harness, more clearly conscious of our restraints than of aught else, and forced to a selfacknowledgment of almost total ignorance of what is within or beyond us. The underlying fundamental principle of human life in all its manifestations is conscious or unconscious trust. We can not understand, yet we believe that our place in the creation is a significant one.

"Thou madest man, he knows not why;
He thinks he was not made to die;
And Thou hast made him; Thou art just."

Vagely within stir the nascent forces. We look to the hereafter for wide arenas, we have dim intimations of the developed powers, the vast activities that are there to unfold. We expect to live forever; and though change and death come to us, we do not believe them to be the extinction of our being. We are charmed by the solace

and the inference, not to be evaded, that the present existence is germinant, embryonic. We have the presentiments

"Of a creature
Moving about in worlds not realized."

"Our souls have sight of the immortal sea," albeit we move around "inland" and in the dark, yet with uplifted heads and eyes fixed upon the stars.

One of the most marvelous of God's gifts to the race is that of speech. Whether it is a faculty inherent to the human nature, or whether it is an endowment from on high, has been a question that has engaged the thought of the profoundest minds. From the recorded history of the prototype of the race it appears that he had some well-defined mode of audible intercourse with his Divine Father Creator, before his mate and consort was brought unto him. He gave names to the lower orders of animals; that is, he designated and distinguished them by significant, appropriate titles. It is written: "The Lord brought them unto Adam to see what he would call them; and whatsoever Adam called every living creature that was the name thereof, and Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field." The task of naming was distinctly, individually, Adam's. When also the woman was brought into his presence, a beautiful salutation, a greeting, a *pæan*, of bridal love, fell from his lips, "Lo, now!" the realizing of a want, a desire, a hope long cherished. "This here is bone of my bones, flesh of my flesh; she shall be called *Isha*, because she has come from me who am *Ish*. Therefore, shall a man leave his father and his mother,

and shall cleave unto his wife; and they shall be one." Adam thus defined the distinction or property of gender, and gave the generic name to the new class of beings, differing from himself, yet identical in species. His method in this particular instance indicates the manner of his inventing and giving names to the other orders, not arbitrarily but inferentially, significantly. For we must bear in mind that originally every name and every word had a *raison d'être*, a fact eminently noticeable throughout the whole system of Hebrew nomenclature. As nearly as can be inferred from the Mosaic record, the capacity for speech in the first man was evolved from within, it was the manifestation of a reasoning, combining well-nigh a mentally creative force, a prerogative of the human intellect alone.

Schlegel considers it the product of the mind and the spirit. And yet a divine element inheres in this wondrous gift. Adam talked with his Maker before Eve was brought to him. Language, then, is not opposed, not foreign to the divine nature itself. The same philosopher is of the opinion that God taught it to man as a mother teaches it to a child.

In its complexity, its inherent beauty, this endowment of speech is scarcely second to that of music; in some respects it is clearly a wider, larger gift. The acquisition of language by young children is a mysterious, utterly inexplicable process, although, because of its commonness, it fails to excite reflection or wonder. That they learn to articulate the names of certain familiar objects is no great marvel, comparatively speaking. In lesser limitations a parrot does the same. But the expression of "thoughts about things," to use the phrase of Tayler Lewis, the expression of those ideas wherewith the mind invests things, is a profoundly perceptive and analytic process that, reasoning *a priori*, would appear immeasurably difficult, utterly unattainable to a being in the earlier stages of development. "How rapidly," observes the philosophic thinker we have quoted, "does the infant mind adapt words not merely to chairs and tables, but to relational thoughts,

substance, number, case, qualifying degree, subjective modality, the relative and the absolute, time as continuous and eventual, as past, present, and future. It knows nothing, indeed, of these as technical terms; but grasping immediately the ideas and perceiving with amazing quickness the adaptation of certain forms to these—a mere termination, perhaps, or the faintest inflection, and this, too, with no outward imitative indices from the sense, such as may aid in the acquisition of the names of more sensible objects, it uses them as adequate expressions of what lies within its thought. This, common though it be, is nevertheless marvelous. We never do it but once."

For the acquiring of other tongues than the native one in after years, is a scientific process, however concealed; a process, also, of translation, carried on by natural faculties, controlled and used at pleasure by the will, as the hand uses and controls instruments. That some power analagous to this of the child mind was native to the first human pair is evident in that every attempt to make a language, every effort at construction in this direction, has been a failure. Neither conventional modes nor imitation appears to have aught to do with the acquisition or the evolution of the primitive language or with those derived from it.

Among recorded miracles that of the Confusion of Tongues has been a serious stumbling block to scientific persons of a Scriptural turn. As a miracle, confessedly it is beyond the boundary of explanation. Yet, as we reflect upon it, the divine displeasure, it would appear, punished the God defiance of the builders by confusing their minds, and, through their minds, their tongues; so that their "thoughts about things" underwent a disastrous metamorphosis. The conception, the idea, must have been dimmed, confused, before its investiture of audible words was changed. We quote again the comment of Tayler Lewis upon this early punitive miracle. "How readily human speech may become confused by a power purely physical or divine is seen in the cases of partially paralyzed persons, in whom the connection between the power of

speech and the articulating organs is suddenly impaired, the link between them being dislocated apparently." So that although speech is not lost, its utterances are misplaced, sometimes reversed. A negative is used in place of an affirmative; the name of one object is used for another. The connection between the words that denote a certain idea is seriously disordered, perhaps, wholly broken. This individual disarrangement, a most mysterious fact, is quite as inexplicable now as in the earliest periods of human existence. Popular and national derangements are more rare; but history records strange movements that suggest a widespread confusion, a divinely permitted aberration, as a punitive measure, as the most probable, if not the only possible explanation of these phenomena.

But possessions and endowments are subject to perversion in proportion as they are precious. Material acquisition, what we include in the term money, is a valuable possession. But to what base uses, to what unspeakable perversion is wealth, gains, subjected. Justice is priceless, but is known more generally by its opposite injustice than by the manifestation of itself. In like manner the inestimable gift of language suffers innumerable perversions and distortions. Hardly one person in ten thousand appreciates highly enough the dignity of this gift to use it with something of the care, the accuracy, the grace that are its due. Hardly one in half a million uses it with entire correctness and elegance. And were a dictionary compiled of linguistic errors, it would compare in size with the completed ones of the language itself. The writer once overheard a conversation in English of perhaps ten minutes' duration, between two rustics. The sounds they uttered were audible, but not one word could she distinguish. The tones were rough, rude, lost in the gullet. Nor is the indistinct utterance of speech limited alone to the illiterate. To speak without mumbling, without offensive guttural or nasal tones, without impeding the flow of sound by half-closed lips and half-closed teeth; in a word, to speak in such manner that the utterance is apprehended

with facility and pleasure by the auditors, is an accomplishment as rare as it is delightful. Great Britain, with a population of forty million, contains, possibly, one hundred thousand persons who speak their native tongue with some fair degree of propriety and beauty. France has the Parisians and the citizens of the university town of Tours who speak pure French; the remainder of the nation pronounce or talk in *patois*; dialects of differing forms. The little area of Hanover includes nearly all good-speaking Germans in the German and Austrian empires. The Berliners are slipshod, slovenly; the Saxon, chanting; the Alsatian, mincing and diletante; the Bavarian and Austrian wholly depraved. In Italy "la lingua Toscana" is the only pure native tongue. The rest is semi-barbarous. In our republic we occasionally find an educated person, perhaps an instructor or public speaker, whose language is fine, but these are few and far between. The tones of the New Englanders are thin, sharp, nasal, without body, and shut in behind a firm double barrier of lips and teeth. The people of the Middle States share some of these defects, and possess others peculiar to themselves. The Western speech is characterized by smooth, intergliding tones, not without facility and energy; in some instances mellifluous, also, but marred more often by a drawl, and defective in crispness and elegance. The Southern drawl is inert, lazy, and aggravated by many errors of pronunciation and of grammar. Even among what we term the educated class, throughout the republic, a fine, free use of the gift of speech is quite as uncommon as an admirable use of the voice in singing. Yet no personal trait indicates "breeding" more unmistakably than tone and utterance. One simple sentence of four words will manifest the grade of the speaker's training. It is often enough to determine whether he is gently bred and college-bred; or, in the case of a woman, whether she was educated at a high-class institution. A person of elegant manners will not shock you by a strident utterance; and a finely attuned voice is an excellent thing both in man and woman.

We purpose, then, to offer some considerations, the result of casual investigation and individual experience; not, however, exhaustively in the way of a treatise on elocution or on style, conversational or of literary composition. For the first, few, save professional speakers, have the leisure; and the second is a fine art, requiring extensive treatment. The observations we offer are restricted to certain corrections and suggestions that have a direct bearing on ordinary speech and writing.

In the art of singing, quality of tone is of the first importance. That the voice be smooth, flexible, without fracture or harshness, agreeable—that the accent be just, the volume of voice full, without apparent excess of effort, are among the prime requisitions. In the art of speaking these points are no less essential; nay, they are the more so, because of the wider range, the vastly wider use of this latter art. A well-educated English person, or one from the European continent, is much superior to us in the exercise of the jaw, the labial, and circumjacent muscles. The speech of these persons is distinguished without difficulty, while our countrymen, as we have written, make slight, often hardly perceptible use of the lower facial muscles, contenting themselves with the tongue and the uvula, and using these behind a double barrier of teeth and lips. Hence, with us vowel and consonantal sounds are faint, imperfect, engulfed in the throat. Our speech is mumbled, and wanting in every element of vocalization.

Free use, then, of the lower facial muscles, for the producing of clearness of tone, is the first requisition for good speech. Move the lips as forcibly, and separate them as widely as you can with comfort, and you will soon find the volume of sound doubled. Let it issue directly from behind the labial aperture, that it be not obstructed by the teeth, and seek outlet by the throat and nostrils. In a word, let it be rotund, round-mouthed. Nasal tones, except for the nasal letters, are vulgar, and guttural ones are insufferable. If, by native defect or want of development, the tone is thin, displeasing, we should set to work to improve

it. A good supply of sonorous voice exists in almost every language, and its rapid improvement will be surprising to whoever will attempt it intelligently. Those public speakers who have practiced the art of elocution have a great advantage over those who have not. We have heard preachers whose distinct, well-modulated utterance gained them the favor withheld from others of higher intellectual abilities, whose thoughts were expressed in less intelligible speech. But the agreeable effect of elocution is, if any thing, more noticeable in ordinary conversation than in public discourse. The pleasure of social intercourse is greatly enhanced by clear articulation and full, pure, crisp tones. An observing person that we have in mind, when describing an individual, invariably alludes to the aspect of the hand and the quality of the voice, two extremely significant indications of character and breeding.

The fundamental tone being developed, modulations, pauses, enunciation, demand our attention. A gamut of variations may be evolved from the ordinary conversational monotone. Modulation practiced discreetly procures melody, freshness, intelligence even in ordinary conversation. Pauses in speaking are as numerous and as graded as in music. First of all, we need deliberation of utterance. How many betray their ill-breeding by a rattling chatter! A delicate separation of the syllables, such as educated foreigners practice when they speak other than their native tongue, gives an indescribably agreeable finish to uttered words, and has also a special use, as we shall indicate hereafter! Every indication of slurring, sliding, hurrying, should be avoided in the fine art of speaking. In conversation it is as offensive as a confused rattling upon a musical instrument. It is noticeable, moreover, that the gay women who jabber are the same who thus "play on the piano."

As for enunciation, this includes careless mispronunciation, whereon much might be written. To begin with the vowels, not one of whose sounds are given clearly and purely in common speech. The New Englander is recognized by his exaggerated, broad a's,

the rest of the Yankee nation by its exaggerated short ones. It is as erroneous to pronounce the *a* of *cant*, *bath*, *command* like the *a* in *bar* as it is to give it the extremely short or flat sound of *a* in *bat*. The correct sound is a shade less broad than that of the *a* in *bar*; it pertains rightly also to the *a* in *psalm*, *balm*, and the like words. Syllables containing this broad *a* should be slightly shortened, as compared with those wherein it is followed by an *r*—*cant*, not *ca-unt*. School children and many others pervert the word rather to *ruther*. This word, like those alluded to above, requires a broad *a* uttered not too long. By practicing the just mean of breadth the ear is not detained nor dissatisfied by either extreme of sound. The same rule of utterance holds good in syllables containing the long *a*—*case*, *mate*, *bahe*. By prolonging the syllable the sound of long *e* or short *i* creeps in—*ca-is*, *ma-ele*, etc. Such words need a clear, crisp enunciation. National, patriotic, rational, paternal, patriarchal, and certain analogous words take the long *a*, although the short is heard in *natural*, *patrimony*, *matrimony*, and some others. Webster, indeed, gives *nãtional* and *rãtional*, yet good usage and euphony permit the long *a* in these special instances. While as we say *nãtion*, *rãtion*, we shall naturally and properly incline to pronounce their derivatives thus. *Tomato* also permits the long *a*, like its analogue *potato*, yet it may take the slightly broad *a* of the French *tomate*, if you so choose. In the case of debatable words the dictionary and best usage are the only guides, and sometimes the latter as opposed to the former. *A* is corrupted into *o* short in *always* (*ol-ways*) in New England and elsewhere.

What has been written of the *a* in suffixes applies equally to the other vowels in like case. *El*, *en*, *ent*, *ment*, should be touched with a delicate distinctness that will enable the hearer to perceive without really noticing them; an utterance that indicates but does not call attention to these terminal sounds. A lady of our acquaintance having observed that providence is usually mispronounced, enunciates it with a strong accent upon the suffix, as if in implied reproof; in

an opposite manner, like certain nuns who allow but meager attention to their toilet, because of the excess of time spent by ladies of society on theirs. Our Eastern folk happily preserve with distinctness the final *e* of these suffixes. An error of certain public speakers is to replace the sound of *ee* before *r* with *u*—*churful* for *cheerful*. The long *i* gets a final cadence as of a long *e*; thus *bite*, *bride*, become *bi-ete*, *bri-ede*. The *i* is short in *finance* and its derivatives, as also in *Italian*; long in *idea*, *identify*, *idol*, *isosceles*, *iconoclast*, and other words spelled in the Greek originals with *i* or *ei*. In choosing between the two we must follow the best usage. In the mouths of certain Episcopalian clergymen *i* becomes *ey*—*beyte* (*bite*), *neyght*, *seyght*. It is also corrupted into *u*—*inspiration*, *satusfy*. In the Middle States a vicious mode prevails of maltreating *ir* by eliminating the *r* and supplementing it with a sound of long *e*. Thus *bird* becomes *bur-ede*, without the sound of *r*. First, *thirst*, *durst*, *curse*—for the *u* in similar position suffers the same fate—and hundreds of other words are thus mutilated in a manner unendurable to a well-trained ear. In New England the diphthong *oa* is cut short in *boat*, *coat*, *road*, and other words, pronounced as *bot*, *cot*, etc., would be with a long *o* spoken shortly. This diphthong should be given with deliberate fullness, as the *o* in *lode*, *mode*. Custom prescribes a short *oo* for *book*, *brook*, *cook*, *foot*, *look*, and certain similar words, while it requires the long *one* for *loot*, *soot*, *moot*, etc. Spurgeon represents a small class of English persons who invariably give the long sound to this diphthong.

U is a bone of contention among pronouncers; some affirming that it should have the sound of long *oo* in words like *tube*, *duke*, *rude*; others that in these and in the suffix *ure*, it should take the additional sound of *ch*, as in *chew*—*tchube*, *literature*. We see no reason why the pure *u* of the French *du* and the German *ueber*—the only pure sound of the vowel—should not be used also in English. It is somewhat difficult to produce, indeed, but would repay by saving us from these intricate and exe-

erable corruptions. If you will try it endeavor to give the sound y-u, not our usual e-u; the former combined rapidly yet enunciated deliberately, the lips rounded as if for an o. A native English-speaking mouth can not produce it so openly as the foreign ones can who are shaped to it from earliest years, yet we can do very well, and, in our opinion, it is the only proper sound for our long u. Whether you will acquire it or not, no excuse can be offered for the sound of oo in new; dew; one might as well say hoo, foo, moo, for hew, etc., or, conversely, say mewn for moon.

Another omission of the New Englanders is that of the sound of r, except as an initial syllabic letter, and even in such case they utter it timorously, with a tongue that in its feeble, backward movement, drops the sound down the throat. They talk of the mauning, the hause (horse); they say saw, do-ah, no-ah (nor), consid-ah, pondah, palit (part), pahsimony, and thus they take the pith out of a thousand words. I have known the discourse of an Andover or Amherst man to produce spinal irritation upon an auditor

sensitive to corrupted sounds. In truth, this error has a disastrous effect upon the whole nervous system of such a one.

The primitive sound of s is sharp, as in so. The sound of z is acquired or secondary, and is used much in excess. Pronounce please, pleasant, and other like words not with a hissing, but with a softly sibilant s, and the effect is comparable to the fine touch of a musical instrument by a skillful performer. No letter is more susceptible of delicate treatment than this consonant. The added sound of h, as in sure, is necessary in some few instances; yet in sin, sion, we prefer the pure s, euthanasia, Asia; as also the clear t in tin, tio, Constantia, Mercutio. For the h in sion, we prefer the sound of y: ascensyon; as also in tion, attentiyon. This is not after the instructions of the dictionaries, but we must remember that good usage directs these authorities quite as legitimately as they direct good usage. And our language is much cumbered with these harsh, continually recurring sh's. What more rasping words, for example, than nashunal, rashunal in a sentence.

CHRISTIANITY AT THE SOURCES OF THE NILE.

THE story of the planting of the Christian missions in the heart of Africa is one of the most remarkable episodes in the history of the century. Whether we regard it in its immediate details only, or in the light of the events that led up to it, or in respect to the ever-expanding consequences which may be anticipated from the future development of the missions, it forces the conviction that the event is destined to mark an epoch in the progress of Christian civilization.

The special attention of the leading Protestant missionary societies was called to the lake region of Central Africa by the publication in London, on the 15th of November, 1875, of a letter from Henry M. Stanley, dated at the court of King Mtesa, urging that missionaries be sent to settle in the kingdom of Uganda, on the western shores

of the Victoria Nyanza. The publication was a surprise, for such applications from heathen rulers were rare, and Uganda was a very distant country, where few white men had ever been seen. A few days afterward the committee of the Church Missionary Society received a letter signed, "An Unprofitable Servant," offering £5,000 for the beginning of a mission in Central Africa. The committee resolved to undertake the work, and another gift of £5,000 followed the adoption of this resolution. The "Unworthy Servant" was understood to be Mr. R. Arthington, of Leeds, who made similar gifts to the London and Baptist Missionary Societies for Missions on Lake Tanganyika and the Congo river, and has offered \$15,000 each to the American Board and the American Missionary Association to help them found similar enterprises.

ADVANTAGES OF THE AFRICAN LAKE REGION.

The region to which these new efforts were to be made to carry the Christian religion was perhaps the most important one not already occupied by Christian missions on the globe. Although it had only a few years before been visited for the first time by Europeans, it was pronounced by all the travelers who had explored it to be the most commanding and eligible part of the African continent, and the part most capable of the fullest development. It was already the seat of a large population of tribes of considerable capacity, even in their savage state. It included the head waters of the two great rivers of Africa, the Nile and the Congo, and, having a line of lakes and feeding streams extending nearly down to the valley of the Zambezi, would probably become in time a center whence direct communication would be established with all parts of the interior. The western and southern coasts of Africa, from the Gambia to Natal and the Transvaal, were already encircled with a line of missions, having nearly one hundred thousand Protestant Christians under their care, with numerous self-supporting native Churches, but the interior had hitherto seemed inaccessible. The invitation now came from one of the most powerful rulers of the interior, who occupied a prominent geographical position in it, to go and establish a center of Christianity under his protection and influence. Other societies decided to forward missions in other parts of the same region. The London Missionary, on Lake Tanganyika, the Church of Scotland, on the Shire river; the Free and United Presbyterian Churches of Scotland, on Lake Nyassa, and the Baptist Missionary Society, on the Congo river; and other societies hoped to follow as soon as they could secure the needed money. But the Church Missionary Society, as the largest and most important organization of the kind in the Protestant world, was looked to to take the lead. This society is a voluntary association of members of the Church of England, which enjoys an income of about one million dollars a year, and has more than twenty-seven thousand communicants, and one

hundred and twenty-three thousand regular attendants on worship in its native Churches in Africa, Asia, America, and the islands. It maintains friendly relations with all the other societies with which it comes in contact, and makes it a principle so to plan its work that it shall assist rather than interfere with theirs, and avoid, so far as possible, the appearance of denominational conflict.

EAST AFRICAN DISCOVERY AND THE SUPPRESSION OF THE SLAVE TRADE.

This society has, for nearly forty years, maintained a mission on the Zanzibar coast, which has recently been made the center of exertions to suppress the slave trade, and out of the operations of which some valuable discoveries in geography and philology have been brought about. They have, in fact, contributed directly to all the discoveries that have been made in this region; and it is only speaking the truth to say that if it had not been for one or two obscure ministers seeking to do their duty by the savages of these regions, the source of the Nile might have remained undiscovered to this day. Dr. Krapf, a Swedish Lutheran missionary in Abyssinia, being compelled to leave that country, settled, in 1844, in the island of Mombasa, whence he intended to travel and preach to the Gallas and other inland tribes. He was joined in the next year by the Rev. J. Rebmann. During the next three years these two men made several journeys to the interior, in the course of which they saw two snow-capped mountains and heard of a great inland sea at sixty days' journey from the coast. Their story of the mountains was ridiculed in the London *Athenæum*; but Mounts Kilimanjaro and Kenia stand in spite of the doubts of the "literary fellers." Speke and Grant heard of the inland sea, and went and found the Victoria and Albert Nyanzas. Dr. Krapf made a vocabulary of the languages of the country, and discovered the principle of the affinity and substantial unity of all the dialects spoken south of the equator. The mission was kept up intermittently, and in a feeble way, till 1874, when the Church Missionary Society, encouraged by the attention given to the subject in the British Parlia-

ment and by the negotiation of a treaty with the sultan of Zanzibar, decided to build up a permanent station near the coast as a barrier against the slave-trade. Some liberated slaves, among them Dr. Livingstone's attendant, Jacob Wainwright, had already been educated at one of the society's stations in India. A party, among whom was Mr. Price, who had taught these Africans, and Jacob Wainwright, was sent out in October, 1874, to establish a settlement, where liberated slaves should be received and taught, and to found a Christian community, with schools. A good site was bought, and a settlement begun, which was called Freretown. Two hundred and fifty slaves, just freed by British cruisers from Arab dhows, had been put under its care, and Jacob Wainwright had just begun to teach his fellow-Africans, when Mr. Stanley's call appeared for missionaries to go to Uganda. Who will dispute with the devoted missionaries when they traced the hand of Providence in all that had been done here before? The researches of Krapf and Rebmann had called attention, and directed exploration to the lake region, and had provided the key to the vastly extended Nilotic family of languages. The station at Mombasa would become a base for operations in the interior, would furnish assistants from among the native teachers and artisans who would be instructed there, and the freed slaves at Freretown would be valuable porters.

A NEW MISSION TO UGANDA.

A party of seven men; namely, the Rev. C. F. Wilson; Lieutenant G. Shergold Smith, R. N.; Mr. T. O'Neil, lay missionary; Mr. A. M. Mackay, mechanical engineer; Dr. John Smith, medical missionary; Mr. W. M. Robertson and Mr. James Robertson, carpenter and agriculturist, who died at Zanzibar, sailed in April, 1876. They were provided with a letter to King Mtesa, expressing gratification at his invitation and declaring that "the greatness of England, of which you have heard, is due to the Word of God, which we possess; her laws are framed in accordance with it, her throne is established upon it, her people are made

happy by it. Our desire is that your throne should be made secure, your country be made great, and your people made happy by the same means. We have resolved, therefore, by the help of God, to send you two or three of our friends, who will be prepared to settle among your people, and to teach them the Word of God and other knowledge which will be useful. The journey is a long one, and the way difficult. But our friends do not mind this if they can be the means of conveying to you the blessings which we enjoy ourselves. . . .

We hope that very soon the Word of God, which, as we have said, is the foundation of England's greatness, will be translated into the language of Uganda, and that it will be the means of establishing a lasting friendship between the kingdoms of Uganda and England, though so far distant one from another." Having arrived at Zanzibar in June following, the party decided to go to the interior by the route which Speke and Grant, Cameron and Stanley had, with slight variations, traversed, to the Arab town of Kazeh, or Unyanyembe, three hundred and sixty miles in the interior, and thence north-west towards Karagué. As far as Kazeh. This would be also the route of the London missionaries' party for Lake Tanganyika, and the two expeditions might help each other. The steam launch of the mission was sent to explore the Kami and Kingani rivers and see if they could be made available for any part of the way. Both were found impracticable, and the whole journey had to be made by land.

A JOURNEY THROUGH THE WILDERNESS, MPWAPWA.

When fully organized, with all the attendants and porters that were needed, the expedition resembled a little army. It marched in four divisions, each led by one or two of the white men. The first division had about fifty porters, the second one hundred and ten, the third two hundred pagnazi, or porters, fourteen other attendants, "three carpenters, one mason, and three stoker boys with four donkeys and a little dog," and "supernumeraries not a few;"

and the fourth eighty-three porters carrying from forty to sixty-five pounds each, an interpreter, a cook, and a carpenter. Zinc tallies were hung around the necks of the porters and pleased them very much. This little host had to march through the swamps and wilderness in single file, in a way from which no obstacles had ever been removed, and sometimes making no more than three miles a day. "It occurs to me often as a poser," says Mr. Mackay in one of his letters, "if two hundred men on a march can give such endless trouble, what anxiety must poor Moses have had on his march with more than two million souls? The Lord was with him, seems to be the only explanation, and my fears are all calmed by the fact that this caravan is the Lord's, and he will give all necessary grace for guiding it." The sultan of Zanzibar gave the missionaries letters to Mtesa and Rumanika, king of Karagué, and a general letter to be used on the way, invoking as good treatment for them as would be given to him. At Bagamoyo, on the coast, they enjoyed the hospitality of the French Roman Catholic Mission, who were exceedingly kind, they say, "in doing little things for us." In about forty-one days they reached Mpwapwa, an important town healthily situated in the highlands of Usagara, where it was proposed to establish an intermediate station, and were heartily welcomed by the sultan with the assurance that he would be glad if they stayed with him a hundred years. He helped them get a site for a house, and they made preparations to build. They could observe no form of religion among the people, but found it very easy to get an audience who would listen for a long time to a speaker in the Luahili language. The station which was established here has become an important half-way point, and is the place at which Dr. Mullens, of the London Missionary Society, died last year. One of the kings beyond this place, "a simple, childish, old man," was delighted to see Mr. Wilson, who was the first white man he had ever seen; was particularly struck with his beard and shoes, and wanted to exchange names with him. The Arab governor at

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Kazeh, or Unyanyembe, seemed to look favorably on the settlement of the missionaries, and to believe that it would operate as a means towards the pacification of the country. At Kagei, near the southern end of the Victoria Nyanza, the party suffered a serious loss in the death of Dr. Smith, their medical man. He had come to them in what seemed a providential way, for the society had not been able to get a physician, and was about to send them off without one when he was introduced, only about a half hour before they received their final instructions. Mr. Mackay had been sent back sick, and improved the time after he recovered in constructing a wagon road from the coast to Mpwapwa, a distance of two hundred and fifty miles along a route which had been marked by Mr. Price of the London Missionary Society and was safe from the tsetse fly, the insect fatal to cattle.

AN INVITATION TO UKEREWE.—MTESA
URGENT.

Letters came to Kagei from Lukongeh-king of Ukerewe, inviting the missionaries to go and see him. Messrs. Wilson, Smith, and O'Neil went. They found the king, whom Mr. Stanley describes as "an aimable, light-colored young man, conspicuous by his robes of red and yellow silk and damask cloth," to be decidedly intelligent, and a wise and popular ruler over a contented and happy people. "He was much pleased at having three white men to show his numerous wives, and asked us to bare our heads for their scrutiny. O'Neil's fine beard attracted general admiration, and the king determined to satisfy himself of its genuineness by pulling it about." He wanted presents, but they had nothing to give him but a penny whistle and a circular looking-glass. They had intended to visit Karagué before going to Uganda, but Mtesa sent letters urging them to go to him quickly, "and let not this my servant come without you." Leaving O'Neil at Ukerewe to finish a dhow which had been bought partly built of one Longoro, an old slave-trader, Mr. Wilson and Lieutenant Smith started for Uganda. Passing the Island of Ukara they mistook the war-cry of the natives for a sound of wel-

come, and were about to land, when they had to bring their boat around to avoid a rock, and saved their lives almost before they knew that they were in danger. As it was, Lieutenant Smith was hit in the eye with a stone and Mr. Wilson was shot in the arm with a poisoned arrow, which did not prove fatal.

A ROYAL RECEPTION.

Two of Mtesa's grantees, neatly clad, met them on landing at Uganda, with an escort of soldiers. Mtesa received them sitting in a chair of white wood with a carpet before him, dressed in a tasteful Turkish costume of red, black, and white. The letters were read to him and translated by the boy Musta, or Dallington, whom Mr. Stanley had left to instruct him. When a reference occurred to our Lord, he ordered a salute to be fired, for joy, it was explained, at the mention of Jesus. "After we had gone," say the missionaries in their letters, "he sent a message to say that he had one word he wanted to say to us, but was afraid to do so before the people in the morning. . . . About four o'clock we went up and found him in one of the side halls with only a few attendants. We asked what the word he wanted to say was, and he said he wanted to know if we had brought the book—the Bible. He did not like to ask in the morning, as there were some Arabs and Mohammedans present. We set his mind at rest about that." At the religious service on the following Sunday, chapters in the Old and New Testament were read, and prayers were had, at which all who were present, by direction of the king, knelt and said a hearty "Amen," after each prayer. An address was made on the fall and the need of a Savior, respecting which the king asked many questions. The king insisted in having a part in all the instructions, and took much pleasure in receiving the lessons and then communicating them to his retainers. As every thing had to be done in public in the full blaze of the court, more or less of knowledge found its way every day to all parts of the kingdom. Mtesa showed a great respect for the name of God, and a care for all matters connected

with religion, and was accustomed to hoist his flag on Sunday in especial honor of the day.

MURDER OF LIEUTENANT SMITH AND MR. O'NEIL.

When Lieutenant Smith returned to Ukerewe he was able to give a good account of King Lukongeh; and put him next after Mtesa in his catalogue of good rulers, but could not get him much interested in matters concerning his soul. He wanted the Englishmen to make rain, but they told him that only one could do that. What, said he, could n't Lukongeh make rain? No, said an envoy from Uganda, not even Mtesa; only God can do that. Lieutenant Smith made a survey of the rivers and bays of the southern end of the lake, and returned to Ukerewe to launch the dhow which they had brought. Lukongeh was planning a war against a rival tribe on the island, and asked Smith for poison to use against the enemy. Smith told him that "the King of kings abhorred such dark and treacherous deeds, and would be very angry if the request were complied with. When the dhow was launched the king seized it, and Smith learned that Longoro had not told of the sale, and had never paid over that part of the purchase money which was intended for his majesty. The affair was explained, a settlement was made, and Smith and O'Neil went their way with the dhow. They returned from their voyage in time to witness an attack by the king upon Longoro's establishment. The ex-slave trader fled to them for refuge; they refused to give him up to be killed, and were murdered in the heat of pursuit. Some time afterwards Lukongeh sent to Mr. Mackay, who had come to Kagei with a caravan of goods from the coast, asking him to go up and hear his own account of the affair. Mr. Mackay was satisfied by other evidence as well as by Lukongeh's words that the murder was not premeditated, but had been committed in a moment of excitement.

PREACHING AND TEACHING IN MTESA'S COURT.

Mr. Wilson was in the mean time residing and teaching at Rubaga, Mtesa's capital.

The people seemed interested, and the hearty expressions of assent which came from them when any thing struck them with special force were very pleasant to hear. "I was much pleased last Sunday," he wrote, "with what the king did. The passage from the New Testament was the raising of Lazarus, which was listened to with unusual attention. At the close, after speaking of our Lord's power and willingness to save all who came to him, I urged them to come to Christ at once, while there was time. As soon as I had finished the king took it up and spoke most eloquently to them, telling them to believe in Christ now, saying they could only do so in this life; when they were dead it would be too late." The Waganda proved a very teachable people, a sharp, quick-witted race, skillful in imitating articles of European manufacture.

Mtesa was not, however, an absolute sovereign. He was politically dependent on his nobles, and they were jealous of the presence and influence of the missionaries; commercially dependent on the Arab traders, and they, being interested in slave-dealing, hated missionaries, and told abominable lies about them. Mr. Mackay was at last forced to tell the king not to believe the stories of the Arabs. Mtesa replied that he had begun to suspect them of untruth, but their presence was necessary for trade. Mr. Mackay offered to send for honest Christian dealers to come from England; and Mtesa wanted to expel the Arabs at once, but was told that he had better wait till the Englishmen came.

A few incidents of interest aside from the regular narrative occurred during 1878. Mr. Mackay suffered a shipwreck at Mkongo, where Mr. Stanley had narrowly escaped massacre, and was able to write from there that, "As in Uganda, Usukuru, or Ugogo, wherever I find myself on his track—even Ukerewe itself—I find his treatment of the natives has invariably been such as to win from them the highest respect for the face of a white man," and that the abuse which had been heaped upon his head was "equally unchristian and unjust." The station at Mpwapwa was permanently established. Mr. Wilson made a canoe voyage on the lake

and discovered that the large island marked "Sease," in Mr. Stanley's map, was really a group of one hundred and fifty islands, most of which were inhabited; King Rumanika of Karagué died without having been visited by the missionaries; and a settlement of the Ukerewe difficulty was made.

MTESA PROHIBITS THE SALE OF SLAVES.

In December, 1878, an Arab trader came to Uganda to buy slaves. Mr. Mackay protested against the traffic, and showed how it was in violation of the laws of the Arab sovereign, the sultan of Zanzibar, and how barbarous and inhuman it was. He then explained the structure of the human body, and, while the people were wondering at the facts he told them, "pointed out the absurdity of Arabs wishing to buy such organisms, which all the wisdom of all the white men could not put together, for a rag of cloth, which a man could make in a day." Mtesa then issued a decree that no one in the kingdom should sell a slave, under penalty of death.

TROUBLE.

The Rev. G. Litchfield, Mr. C. W. Pearson, and Mr. R. W. Felkin, medical missionary, were sent out to Uganda in May, 1878, by way of the Nile. They were met at Mruli, the last of Colonel Gordon's stations in Egypt, by a deputation from the mission and the king, and were received at Rubaga with great honor. They brought a letter from Lord Salisbury, and letters from Mr. Stanley and the missionary society. Mtesa had been ill for several months with a growing disorder, and Mr. Felkin became his medical attendant. A few days afterwards two Jesuits came with the purpose of establishing a mission. They said the priests at Bagomozo had spoken well of Mr. Mackay, and the king asked the latter if he knew any thing about them. He gave some account of the differences between Roman Catholics and Protestants, and then asked the Jesuits if they were not aware of an arrangement which the Church missionaries had made with the Bagomozo people, that neither should interfere with the missions of the other. The Jesuits replied that they

belonged to a different order from the priests at Bogamozo, and were not bound by the arrangement. Mtesa's humor changed, and he began to annoy the Church missionaries and interfere with them. Messengers came up afterwards with a report that a Church missionary caravan had been murdered near Unyanyembe, and bringing a letter in Arabic from Dr. Kirk. This letter really explained that the Church missionaries were not emissaries from her majesty's government, but voluntary evangelists, and commended them to the king's protection, and informed Mtesa that the Nile party had letters from Lord Salisbury. The Arabs interpreted it as saying that no Englishman in Uganda came from the queen, or had letters from the English Government. When the English missionaries denied the truth of this interpretation, and appealed to Lord Salisbury's letter, the chiefs and coast people said they were impostors, and that Lord Salisbury's letter was a forgery, and Mtesa seemed to agree with them. Matters at last became so unpleasant, that the Englishmen began to prepare to withdraw from the country. Mtesa was not willing that they should go, and considera-

ble negotiation was required before it could be arranged that Mr. Wilson and Mr. Felkin should go away with ambassadors from the king to Colonel Gordon and the queen, while three of the missionaries who were left should retire to the south, and Messrs. Mackay and Litchfield should remain in Uganda.

According to the latest accounts which have been received, the party traveling north were at Foweisa, a town on the Upper Nile, the relations of the Englishmen in Uganda with Mtesa had recovered their friendly character, and the services at the palace had been resumed. Occasional difficulties had arisen from the king's jealousy of the Egyptian power, and it had become manifest that much of the suspicion from which the mission had suffered in March and April was due to the king's fancy, aggravated by his disease, that the party who came by way of the Nile were secret emissaries of the Egyptian Government. An unpleasant friction was developing between the Jesuits and the English missionaries, which threatened to hamper the future progress of the work of conversion.

LEYDEN AND ITS UNIVERSITY.

ON the night of the 2d of October, 1574, a violent equinoctial gale came storming from the north-west, piling up the waters of the North Sea in vast masses upon the southern coast of Holland and then dashing them furiously landward, until the ocean, rising over the earth, and sweeping with unrestrained and resistless power across the pierced and ruined dykes, and inundating all the territory in the neighborhood of the long-beleagured city of Leyden, enabled the Netherland patriots, under the indomitable Admirable Boisot, to put the Spanish besieging forces to flight, and to relieve the nearly famished, yet dauntless, noble city.

The names of Haarlem, Alkmaar, and Leyden, hallowed as they are by deeds of patriotism such as have seldom if ever hal- lowed human annals in the eloquent and

fitting language of Motley, "breathe as trumpet-tongued and perpetual a defiance to despotism as Marathon, Thermopylae, or Salamis." Nay, from that bleak isthmus during all this past three hundred years and over, the light of freedom has been streaming out upon struggling humanity, not only in Europe, indeed, but throughout the world. In fact, the sturdy, heroic, resistance on the part of the cities of Holland against the tyranny and usurpation of Spain, hotly bent on stamping out Protestantism and liberty in the Low Countries, was the salvation of the Netherlands; and the independence of the Netherlands, achieved through this so protracted and bloody struggle, was the salvation of all this great western world to Protestant Christianity and to freedom. But for Leyden, faithful,

literally even unto death, nay, but for the seemingly providential interposition of this devastating tempest just at that crisis, on the North Sea, there could, we venture to say, have been no New England, and but for New England there could have been no enlightened free America.

These Hollanders in those days were intensely religious. Not only were they zealous Protestants, they were earnestly, intelligently, devoted Puritanical Christians. No more impressive scene has ever been recorded on the page of history than that presented in Leyden immediately upon the relieving army, alluded to above, entering the gates of the city. No sooner had this entry been effected, and their long and anxiously waited for deliverance had become an accomplished and well assured fact, than all the inhabitants, magistrates, and citizens, wild Zealanders and emaciated burgher guards, sailors, soldiers, women, children—nearly every living person within the walls—all overjoyed, without delay repaired to the great church, stout Admiral Boisot himself leading the way, and bowed themselves there in humble gratitude before the King of kings. After prayer the whole congregation joined in the thanksgiving hymn. Thousands of voices raised the song, but few only were able to carry it to its conclusion, for the universal emotion, deepened by the music, became quite too full for utterance. At length the hymn was suspended altogether, and the whole congregation broke down and wept like children.

Meantime such gratitude, such a profound and grateful sense of divine interposition on behalf of their city and people as this conduct on the part of the citizens of Leyden manifested, was not likely speedily to subside or to vanish with a mere religious service or ceremonial, however sincere. It must needs signalize or assert itself by some more outward and enduring monument. More, it was widely felt throughout Holland and Zealand that some fitting and perpetual memorial of the almost unequalled heroism, endurance, and fortitude of the citizens of Leyden, at this most important crisis, should be provided, and that at the

public expense. Accordingly it was at once resolved by the estates of Holland and the Prince of Orange, that an academy or university should be forthwith established within their walls. And thus was founded the University of Leyden, afterwards so illustrious, the institution which subsequently gave so many earnest, learned men to the Church, and which exerted so important an influence upon the intellectual and religious development of Europe. It was born in the very darkest period of the country's struggle, and commemorates at once the almost superhuman fortitude of this noble freedom-loving people, and their profound gratitude to and unshaken confidence in Almighty God.

The subsequent marvelous expansion and almost unrivaled prosperity and patronage of this university is well known. Meanwhile it is still one of the most renowned and prosperous institutions in Europe, numbering some six hundred students and thirty-three professors, and fully maintaining its former high character for scholarship. As late as 1873 the states-general voted one million three hundred thousand florins for the erection of additional buildings, and additions to the cabinet collections. For centuries it has constituted, as it still does, the principal ornament and pride of the city of Leyden.

Meantime this monumental school possesses a peculiar interest for all Methodists. It was here that Arminius and his hardly less distinguished disciple, Episcopius, were educated, and afterward became theological professors. It was here that the former had his famous disputes with Gomarus, and the latter with Polyander—both professors, also in the same institution, but both bitterly, dogmatically Calvinistic. Here, therefore, in this very University of Leyden, in a very important sense, Arminianism, or Methodist theology, may be said to have been cradled, if not born. True, the mild views of Melancthon, commonly known as Lutheranism, and substantially identical with those of Arminius, had prevailed extensively in Holland—in fact, more extensively than the Calvinistic tenets—ever since the earliest

dawn of the Reformation. But providentially Arminius and his coadjutors were led to define and discuss these views in a way to make them henceforth a peculiar power in the Church of God. It may not be positively known to what extent John Wesley personally, or his great revival in general, was indebted to the theological labors of the Holland Remonstrants. There is no satisfactory evidence, so far as we are aware, that at the time John Wesley's theological opinions were assuming definite and permanent form, he was conversant with the works or views of these aforesaid professors of the Leyden University. There can be no doubt, however, but that in the course of its subsequent development and progress, particularly during its long and singularly stormy controversial period, the Wesleyan movement was greatly indebted to the polemics of its most illustrious predecessor in Holland.

In this same University of Leyden also, about twenty years after its foundation, was educated the celebrated Hugo Grotius—one of the greatest luminaries of Europe for genius and learning. He was equally distinguished in literature, the ancient classics, jurisprudence, diplomacy, and theology. Indeed, there was hardly a branch of science or department of learning in which he did not seem to be an expert, while he never touched a subject but to adorn it, or expressed an opinion to which others might not thoughtfully and profitably attend.

Grotius early became identified with the Arminian movement, and, accordingly, with Episcopius, Barneveld, Hoogarbets, and many others, after the session of the famous Synod of Dort suffered deeply on behalf of the good cause. Most of his later years

were spent in Paris, though for certain intervals he dwelt also at other European capitals. It is highly probable that most of our readers are familiar with the story of the imprisonment of Grotius, and the romantic circumstances of his escape. Having been arrested by Prince Maurice, the Calvinistic usurper of the Netherland government, most unworthy representative of so noble a sire, for the crime of defending and supporting the principle of religious toleration, he was by him condemned, first to death, and then to perpetual imprisonment. He was committed to the castle of Loevenstein, a prison situated on an island formed by the Waal and the Meuse. His own father was denied the privilege of seeing him, but his devoted wife at length obtained permission to share his fate, and with her society and in close habits of study he found his prison a by no means intolerable home. After nearly two years' imprisonment—during which period he prepared his celebrated annotations on the Gospels—the escape of Grotius from his confinement was effected through the wit and address of his wife. It had been her practice to receive and to send away books on behalf of her husband, in a great chest; and observing that after a time the guards neglected to examine it in its passage to and fro, she finally inclosed her husband therein, and had him thus shipped to the main-land. The passage was stormy, and the poor man, in his extremely narrow and uncomfortable quarters, suffered the most intense torture. The stratagem, however, proved a complete success, and in the disguise of a mason, he finally made good his escape to Antwerp, where, not long after, he was rejoined by his faithful wife.

EDITORIAL MISCELLANY.

EDITOR'S STUDY.

THE GENERAL CONFERENCE.

THE General Conference of the Methodist Episcopal Church for 1880, the eighteenth held since its constitution as a delegated body, met in the city of Cincinnati on the first day of May, and adjourned on the 28th, after a session of just four weeks. As compared with preceding General Conferences (except that of eight years before) this was a very numerous body, and yet the time of its session was somewhat less than the average. The following table presents in detail some important facts respecting this body at its several sessions:

Date of Conf.	Place.	Number of Members.	Time of Session.
1812	New York,	88	May 1 to 22
1816	Baltimore,	103	May 1 to 24
1820	Baltimore,	89	May 1 to 27
1824	Baltimore,	120	May 1 to 29
1828	Pittsburg,	176	May 1 to 24
1832	Philadelphia,	290	May 1 to 28
1836	Cincinnati,	128	May 1 to 27
1840	Baltimore,	142	May 1 to June 3
1844	New York,	192	May 1 to June 10
1848	Pittsburg,	151	May 1 to June 1
1852	Boston,	179	May 1 to June 1
1856	Indianapolis,	217	May 1 to June 3
1860	Buffalo,	222	May 1 to June 4
1864	Philadelphia,	216	May 1 to May 27
1868	Chicago,	243	May 1 to June 1
1872	Brooklyn,	Ministers, 292 } Laymen, 129 } 421	May 1 to June 4
1876	Baltimore,	Ministers, 222 } Laymen, 133 } 355	May 1 to May 31
1880	Cincinnati,	Ministers, 246 } Laymen, 147 } 393	May 1 to May 28

There were ninety-five annual conferences (seven of them in foreign lands) represented in the General Conference of 1880.

Most of these sessions have been remarkable severally for some chief point of interest then commanding attention. That of 1812 was principally constructive, settling the forms and order of the Discipline of the Church and its modes of administration. In 1816 the presiding elder question began to be discussed, and that continued to be a chief point of interest during next two sessions. In 1828 the "Radical" movement (so-called) in favor of lay representation, and certain modification of the episcopacy excited a good deal of interest, but was decidedly disfavored. The General Con-

ference of 1836 was somewhat affected by the "abolition" movement, then beginning to be felt all over the land, and strong repressive measures were adopted to prevent its gaining ground in the Church; and that of 1840 was largely affected by the same influences and subject to the same ruling spirit. The session of 1844 is memorable for its action respecting Bishop Andrew and the adoption of measures that resulted in the division of the Church, and the establishment at length of the Methodist Episcopal Church South, to undo which as far as possible and to guard against its evil results was the chief business in 1848. The session of 1852 was not much disturbed by questions of either polity or administration, and it seems to have been much more constructive and administrative than reformatory, and the same was the case in 1856, though the rising anti-slaveryism of the Church was felt in it as a disturbing presence. In 1860 that sentiment asserted itself in great force and effected a strong declaration against all proper slave-holding as morally wrong. The session of 1864 was held during the pendency of the War of the Rebellion, and was especially distinguished for its intense loyalty to the government and its opposition to slavery. In 1868 the lay delegation movement was a subject of chief interest with which the progress of the work in the South divided the attention of the body; and in 1872 lay delegates were admitted, and the asperities of feeling between the two sections having somewhat abated, incipient measures were adopted for the establishment of fraternal relations with the Methodist Episcopal Church South. In 1876 the presiding elder question again came to the front, and was left still unsettled to plague still later times.

The composition of the late General Conference is not without its interests. Of the ministerial delegates one hundred and twelve were

presiding elders, and ninety-five pastors, though of these latter a considerable proportion were presiding elders when elected. Twenty-two were college officers and teachers, and fifteen General Conference officers. It does not appear from the record that there was among the delegates a single superannuated or supernumerary minister. The principal business callings of the lay delegates were, merchants (27), lawyers (26), manufacturers (21), bankers (15), farmers (12), physicians and teachers (each 8), mechanics (5) and other pursuits in smaller numbers. There were in the body thirty-six colored delegates, and one Hindoo; one Chinaman had been elected, but did not show himself. There was one delegate each (ministerial) from Germany, Norway, Sweden, Liberia (Africa), and Foo-Chow (China), and two each (one ministerial and one lay), from North India and South India. Of the delegates to the General Conference of 1876 only about seventy appeared again in 1880, though with them were about an equal number who had belonged to earlier General Conferences. And yet the latest was constituted, as to more than half its members, of entirely new men, most of them, therefore, unacquainted with each other, and generally unused to the methods of transacting the business of such a body—the effects of which were very clearly seen in the progress of the session.

The physical condition and environments of the body were not altogether felicitous, and that state of the case evidently exerted a damaging influence upon its *morale* and affected unfavorably its proceedings and results. The place of the session—Pike's Opera House—is to the last degree ill-adapted to such a purpose. A theater is constructed with the understanding that the occupants of the seats shall be simply spectators and that only the stage is to be seen or heard from; but for purposes of deliberation the members of the body must be able to speak from their seats, and in order to be heard to advantage they must be seen by each other. Accordingly a theater or opera house is about the worst possible place for the session of a deliberative body. The value of proceedings had among such conditions can not fail to be injured by them. Less work can be done and less satisfactory results reached among such unfavor-

able surroundings than in other and better conditions.

The last three sessions of the General Conference have been held in buildings of this objectionable character, of which, however, that last used was altogether the most unsuitable. Four hundred full-grown men cooped up in a compactly seated theater which allowed no surplus space for unusual breadth of body, or spread of the elbows, or for any undue reach of the thigh-bones, where during protracted sessions for successive weeks the same, prim, upright position must be maintained, would not probably be found in the best possible condition for wise and deliberate action respecting the highest and most sacred subjects. It may not be amiss to suggest that for future General Conferences other and better arrangements should be made, which may be done with but little if any increase of expense even if a temporary rink were provided; and in such a case it might be well to consult the comfort and convenience of the body rather than the pleasure of the spectators, to whose demands it is quite possible to sacrifice the real purposes for which such assemblies are held.

Of the eighteen successive sessions of the delegated General Conferences only the first and second ones (1812 and 1816) sat less than four weeks, the time occupied by the last; although this, as compared to those, comprised four times as many delegates in attendance requiring a corresponding extension of its time for action, even without making any account of the vastly augmented amount of business that demanded the attention of the last named body. It is quite evident, therefore, that either the one hundred men of 1812 and 1816 were sadly inefficient or culpably dilatory in their work, or else that the four hundred of 1880 were miracles of effectiveness if, indeed, they performed all the work that needed to be done, and at last adjourned only because there was no further need of their services. Probably the methods of transacting business are now better and more expeditious than was formerly the case, though in all such grave and weighty transactions time itself is an important element. On the other hand it is well-known that the time required for safe and effective work in such a body is increased about in the same proportion in

which the number of the body is enlarged. If then the one hundred members of the early General Conference found need to sit twenty or more days, the four hundred of the present year would need not less than three months to do the same work equally carefully. Add to all this the further all-important consideration that the amount of business requiring the careful attention of the General Conference has quadrupled since 1820, and then the conclusion seems to be irresistible that much of the business that legitimately required the consideration and action of the body recently in session must have been done hastily and without due deliberation, or else it was left altogether undone. There is altogether too much grounds for suspecting that both of these disagreeable alternatives must be accepted as not altogether unjust. Undue haste and pressure to reach the end has become dangerously characteristic of recent General Conferences. Congress is in session fully half of the time, and yet the public business suffers for want of attention. Our State legislatures sit from two to four months each year, the General Assembly of the Presbyterian Church sits annually about three weeks, or twelve weeks in four years, and the Protestant Episcopal Church triennially about twenty working days, after having the business of the convention very thoroughly prepared before the session, so that but very little committee work has to be done. But the Methodist Episcopal Church, of twice or three times the size of either of these, and because of its mere centralized form of organization having a larger proportion of business for the General Conference to do, devotes less than a month's labor once in four years, about six days to each year, to all its vast and complicated connectional interests. Certainly, then, there must be a strange waste of time and labor on the part of others or else an undue haste and great inconsiderateness of proceeding in ours.

The ideal of the General Conference is, that in its composition it is especially a representative body, and in its action eminently deliberative; but both these conditions are very far from being completely realized. In respect to the former, the ministerial delegates are formally the representatives of their constituents, the annual conferences; but, in fact, they very imperfectly represent the opinions of ecclesi-

astico-political preferences of those by whom they are elected. Men are sent to the General Conference chiefly from personal considerations. A leading man in his conference is pretty sure to be chosen, without regard to his views in respect to questions of polity or administration, and not unfrequently two men of widely differing positions are chosen by the same constituency. In some of the conferences certain men are almost sure to be elected, though possibly they may not be in harmony with most of the body on certain pending questions of great interest. It will be seen that the presiding elders are sent to General Conference quite beyond their numerical proportion, and no doubt very much beyond their relative personal claims; and so it happens, in fact, that the power which makes presiding elders, in so doing, effectually, however, without design, or conscious intent, puts them in the way to be elected to General Conference. In an important sense, therefore, that large portion of the ministerial delegates are representatives of the episcopacy; nor would it be a violent presumption to expect that, having so come into their places, they afterwards, practically, remember their obligations for the favor received. The lay delegates are not even formally the representatives of any body, and clearly not in respect to the great body of the laity of the Church, who have no voice directly or remotely in their selection. They are chosen by the electoral conferences, whose members are named by the quarterly conferences, which last bodies, it is well known, are made up of persons appointed by the pastor, either absolutely or with the concurrence of the members of that body. Like the ministers, the lay delegates are selected chiefly for personal reasons; and though, probably, they generally and pretty fairly represent the views and wishes of the Churches and individuals of their proper localities; yet, if so, this is only accidental and entirely informal. While, therefore, it may be granted that the General Conference very fairly represents the opinions and preferences of the whole Church, that result is reached through the individual characters of its members, much more than by virtue of the method of their selection. Because there are no clearly defined parties among us, all who are truly of the Church, and

devoted to its interests, are, as such, representative men.

Respecting the claim that the General Conference is a deliberative body, the case is much less satisfactorily made out. True, the primary design of such an assembly is deliberation, and some pretense in that direction is all the time kept up; but the facts of the case amount to very little more than a pretense. Real deliberation, the "careful discussion and examination of the reasons for and against a measure proposed to be adopted or enacted, finds very little place in the proceedings of that body; nor does it, indeed, seem to be practicable. So large a collection of men brought suddenly together, wholly unused to act together, and most of them unaccustomed to every thing of the kind, can only, after a good degree of training, which itself requires time, engage intelligently and effectively in deliberative proceedings. The discussion and examination of such subjects as naturally come before the General Conference, supposes that some members of the body are properly informed respecting them, while others are not, and the discussions are designed to afford to all alike the opportunity to be so informed, that they may vote understandingly. But an adequate elucidation of almost any of the great questions to be decided requires more time than can be allowed to any speaker, and, accordingly, the rules of the body, themselves made necessary by its conditions, directly and effectually preclude deliberation. Even in the committees the same evils prevail, only in a mitigated degree, and their reports crudely and hastily formulated, when presented to the body for its deliberation and determination, must be still more hastily passed over and voted upon by men who can not by any possibility duly appreciate the purport of their own actions. The dangerous character of the General Conference, which all must feel who consider its actions, is found much less in its form and composition than in its methods, and especially in the headlong speed with which it rushes over the most difficult and delicate legislative and administrative problems. "To lay on the table," or to "postpone indefinitely," or to order the "previous question," may seem to be shrewd parliamentary tactics; more frequently, however, they are the

expressions of superficial and self-conceited recklessness.

The record of the doings, and the omissions of the late General Conference has gone to the public, and we are not disposed to restate it. The time has gone by to repeat it as news, and it is yet too soon to re-examine it, in the clear light of its own historical outcome. And yet we may glance hastily at some of its salient points. The conference was remarkable at once for its extreme cautiousness at some points, and its wild disregard of certain general principles which underlie all written laws, and over which legislatures have no right of action—for no assumption of such a body could be more dangerous than that its power is limited only by its own will. Two cases of this class occurred, both of them in the revised code—which is a decided improvement over its former self—affecting the tenure of membership in the Church, and in the annual conference, in respect to both of which was implicated the monstrous assumption that the law-making power can, at its pleasure, change the conditions and tenure of Church membership. It was proposed, and actually passed into a law, but afterwards stricken out on reconsideration, that for refusing to "contribute according to his ability, to support," not the Gospel, but "the minister," which fact should be ascertained by a regular form of trial, a member might be expelled from the Church. This was not only to institute a new condition of membership, and to make the law retroactive, but also to adopt some of the most odious abuses of the Church of Rome; and, in fact, to set a money price upon the most sacred offices of the Church. The monstrousness of this action induced some of those who had voted for it to move for a reconsideration, when it was stricken out, but still against the votes of a large minority. The other case, which not only passed, but is now the law of the Church, empowers the annual conference to remove from the position and standing of a traveling preacher any one of its members who may be adjudged, not after a proper trial, but by a vote of the conference, and therefore without appeal, to have become "so unacceptable (*!*), inefficient, or secular, as to be no longer useful in his work." This action practically ignores and denies the continuous right of a member of an annual conference to his

position, and makes him a simple "tenant-at-will," holding his place by sufferance, and liable at any time to be excluded without any judicial process, simply by the votes of the body.

The tenacity with which obsolete forms and provisions are held on to was exhibited in the refusal, first in committee, and afterwards in the conference, to provide for striking out of the General Rules the item forbidding "the putting on of gold and costly apparel" and while probably three-fourths of those present actually were wearing gold at the time. Yet a majority chose to continue to say of this, among other things, "all these we know that his Spirit writes on truly awakened hearts." And further to declare, "If there be any among us, . . . who habitually break any of them, . . . if he repent not, he hath no more place among us." Until the attempt was made for its removal, that rule was simply dead matter in the Discipline, but the formal vote to continue it therein vests it with new life. So in that most solemn and searching ordeal to which every candidate for admission into the traveling ministry is subjected, and which, if it is not a solemn farce, is a most sacred and binding consecration of one's whole life and conduct to God and his Church, in the first place, though it is known that the practice of fasting, as an ordinary religious duty, has become almost entirely obsolete in all Protestant Christendom, and is, with but few exceptions, disused by both our ministry and laity, yet, when it was proposed to cease to require all candidates for the ministry solemnly to vow, before God's altar, that they will "recommend fasting or abstinence, both by precept and example," a majority voted that they must so vow, though nobody expects them to keep the promise then and there to be made. And then, as if it was not enough to continue to repeat the forms that have come down from the fathers, though confessedly disused in practice, the new and relatively frivolous pledge not to use, or misuse, tobacco is hereafter to be exacted among the solemn and soul-searching promises of that sacred hour. Respecting the undesirableness of the forbidden practice, we have shown our faith by our works; but so long as the bishop that propounds the question may be an habitual tobacco user, and also a large portion of the conference before whom the

pledge is exacted, it seems to be but little better than trifling to require such a pledge of the candidate.

On the "woman" question the action was, in some of the details, apparently progressive, though on the whole decidedly conservative. Hereafter women may be regularly appointed to the offices of stewards, class-leaders, and Sunday-school superintendents; and as these are in some cases the only members of the quarterly conferences, it may happen that some presiding elder will find himself at the head of a company of women, licensing preachers, and recommending them for ordination or for admission into the traveling ministry; while, by another act of the same body it is determined that a woman can not become a "preacher," in the sense of the Discipline.

A plan for the introduction of lay delegates into the annual conferences, carefully prepared in committee, and discussed with unusual fullness in conference, was at last defeated, largely through the opposition of the lay members. A scheme for dividing the General Conference into two chambers, made up respectively of the ministerial and the lay delegates, which came from an able select committee, recommended with almost absolute unanimity, was, after a brief discussion, defeated by a decided minority, which, probably, fuller discussion, and more mature consideration, would have increased rather than reversed. Remanding the work in the sparsely settled regions of the Rocky Mountains, parts of which had been erected into annual conferences, back into the condition of mission districts, to be administered as are foreign missions, was an action clearly shown by experience to be necessary for both safety and economy. The subject of the relations of the conferences that have been organized in foreign lands to the home Church was brought before the conference, and largely discussed in committee, but almost nothing final and definite was effected. It appears from the developments made that there is in nearly all of those bodies a steady tendency towards autonomy and independence, which, however, is retarded both from a sense of attachment to the mother Church, and of need of its counsels and directions, and also by the fear that such a severance might diminish or en-

tirely cut off the pecuniary aid received from the latter. It seemed, however, that while organic autonomy will almost certainly result from the growth and enlargement of the work in those distant fields, the time for such a severance should not be hurried, but be left to come about by the natural course of events.

The action of the conference respecting the publishing interests of the Church was in some respects intensely conservative, and in others it was altogether revolutionary. Hitherto the Book Concern has been administered somewhat in a missionary spirit, having for its intent the preparation and diffusion of wholesome religious reading among the people, but making its financial affairs secondary in importance, and to be regarded principally as a means to the chief end for which the Concern is maintained. And accordingly many things have continued to be published that were known to be pecuniarily unprofitable—their moral and religious results justify the financial loss incurred. The new policy (only partially brought into practical effect) attempts to subject the management of the Concern to "business principles," so that whatever does not pay in dollars and cents must be abandoned. That a change of policy in that direction has been needed we have long believed, and have been roundly rated for so declaring; but like many another reformation, the change in this case was taken in hand rather violently, and an end good in itself was so pursued that there was danger of harm being done by the violence and the unskillfulness of the methods used. Under this new rule of administration both the magazines (English), published by the western house, were ordered to be discontinued—an arrangement to which we did not object, having become fully satisfied that the principles and plans adopted and followed in their publication could result only in failure.

The Afro-American element in the conference, as is usually the case with that element every-where, seemed to be a disturbing force in the body, and in nearly every instance it came off second in the conflict. In the organization of the conference and the committees no colored man was elevated above the common level. The exclusive devotion of the funds of the Freedmen's Aid Society to colored schools, ordered by former General Conferences, was so modified that white schools may also share in

them—possibly receive the "lion's share." The action in respect to the election of a colored bishop was not at all assuring to the hopes of those who had asked for it. No one doubts that colored men are just as eligible, in law, to that office as are white men; and yet nobody believes that in any supposable contingency a colored man could be chosen to that position, in the ordinary course of an election. The plea put forth that to elect a colored man, as such, to the office of a bishop, would be a wrong because it would recognize and indorse race distinctions in the Church comes altogether too late to be available in this case, since all over the old slave-holding region, and somewhat beyond, there are two sets of annual conferences covering the same area, which are separated from each other strictly by the "color line." And since the colored people must thus dwell by themselves, having, except a bishop, all their own Church orders and officers, why, it may be asked, not grant them this one also? But here as elsewhere, with their race, that class of our Church members and ministers must be content to "wait a little longer," and to abide their time, which, though long a coming, is pretty sure to come at length; and though their claim to a just recognition may seem to be "indefinitely postponed," in the language of one of that race, "the negro will not be postponed." It only remains for the colored people of the Methodist Episcopal Church to abide faithfully in their positions, steadfastly refusing to listen to any who would alienate them, and improving all their opportunities, and as surely as God is just and the right is destined to prevail, their proper recognition in the Church will come at length. While we fully believe that our Church has lost a glorious opportunity by refusing to go forward in the way indicated by Providence, we do not surrender our faith that even that error will be corrected in form, and that our five millions of native American Protestants "of African descent," of whom more than two hundred thousand are of our own communion, and twice that number might be had by wise treatment, will yet receive what is just and equal at our hands. During the life-time of the present and the next succeeding generation they will continue to be a separate class; and yet the highest interests of both themselves and the whites require that they shall be part

and parcel of our common Church organization, and, as such, they should share in all its honors and responsibilities.

As a general statement of some leading facts in the case we insert with approval a paragraph clipped from the *Central Christian Advocate*:

There were matters of great interest in reports of the standing committees which failed to get consideration on account of the too early adjournment. For a while it seemed as if the conference would have the grace and courage to remain and complete the work prepared for it by the committees. But so much time was spent on questions of order and minor matters that important matters were crowded out. It would have been much more satisfactory had the conference taken up some of the questions and clearly indicated its position in regard to them.

Others were passed in too great haste, and had no adequate discussion. There were matters presented by the committees on Missions, on the Itinerancy, on Revisals, on the Episcopacy, that had no hearing at all, or were passed over with inconsiderate haste. And there was altogether too great a display of parliamentary tactics. We hazard the assertion that more time was spent over questions of order than in the discussion of the most important matters. Never before, perhaps, did the committees do their work so thoroughly. The debates in the committees on the Episcopacy, Missions, Book Concern, and Itinerancy were abler than those on the conference floor, and at times gained the attention of many visitors. Had the conference remained in session two days longer every report might have been disposed of satisfactorily. There ought to be an understanding that this shall not occur again.

FOREIGN AFFAIRS.

NORWAY.—This land of the North has seldom attracted American travelers, but the few who have gone thither have always been enthusiastic. Here is what a recent visitor has to say of it: "Not a land flowing with milk and honey. Not a land of olive-yards and vineyards, of southern skies and effeminate luxuriance, of Spanish dances and Italian serenades, of soft intrigues and quick revenges that wait upon life itself. Not a land of fragrant breezes, where the nightingale sings to its mate, while the moon, with her train of satellites, in stately dignity rises in the dark-blue dome, bathing the earth in a silvery flood, the while lovers pace romantic ruins washed by a broad flowing Rhine, or a sterner Danube, or linger in the bowers on the banks of the soft, blue waters of a Moselle—lovers whose lips are silent for a bliss that is filling their hearts with an emotion for which an eternity would be too short, and life, alas, often proves but too long. Not this. But a land of eternal snows, whose mountain-tops are fraught with a mystery of a silence that is never broken, where the foot of man never falls; of gigantic icebergs, of rushing streams, of grand water-falls, and mighty cataracts that seem to increase and multiply as you progress through the country. A land which owes every thing to nature, and nothing to man;

where ruins are not, and the nightingale's song is unheard, and bowers of roses may be read about but scarcely seen. A land scantily peopled, but peopled by men and women honest and fearless, simple and genuine, frank and hospitable, until a day will come when mixture with the world, which seeks them more and more every year, may give the faults of that world, and take from them their best heritage—a single, a simple faith, an uprightness of purpose rare as beautiful, after six thousand years of leveling. A land where railroads are scarce, and traveling is long and laborious, but very pleasant. A land not pampered by the refined luxury of the age, the squandering of wealth in pomp and vanity, purple and fine linen. But a land of stern realities, where wealth is rare, and each man's inheritance is labor and toil. A land with bright, bracing air; a land that reminds us, in a measure, of that city that has no foundations, where there is 'no night;' for here, during some portions of the year, the sun never sets, and darkness falls not."

DOES FRANCE WANT ANOTHER WAR?—Not if we may trust the words and judgment of the men who now lead the young republic. The Paris correspondent of the *Neue Freie Presse* (Vienna) has had a most interesting talk with

the French premier, during which the question was put: "Is your country still thinking of a war of revenge?" "War!" exclaimed M. de Freycinet. "Never! True, I did my duty during that unfortunate campaign. But it is precisely because I saw it face to face; because I felt the enormous sacrifices it had cost the country, that there is no more passionate adversary of war than myself. France must be in a position to defend herself, but she will never enter upon another war; never, so long as I remain at the helm. But," he continued, "Frenchmen can not be blamed for a feeling of vengeance, which is a manly sentiment, according to Jacob Grimm. All that we have to consider is how revenge can agree with a sound policy, and feelings with reason. Usually, they agree very badly, or not at all. Woe be to reason when it does not find a firm ally in the feelings! This France has found in compulsory military service. Since the well-to-do bourgeois is no longer able to buy out his son from the service, a spirit of peace has entered every home and every heart."

DYNASTIC TREES IN CHINA.—The Chinese are accustomed to associate the fortunes of their reigning families with the lives of trees, and each dynasty has a special tree dedicated to it. The duration of the dynasty is held to be indissolubly bound up with the existence of the tree, and inspection is frequently made of the latter, in order to ascertain from its condition the reigning sovereign's prospect. The appearance of the tree is expected to furnish incontestable proof of the true state of the empire. It is impossible to assign an origin to this superstition, which is of great antiquity; but, to go no further back than the fifteenth century, Younglo, the third of the Ming rulers, planted a fir tree, which endured until the overthrow, two hundred and fifty years afterward, of his descendants by the Manchus. The story is told that Hwan-Tsung, the last of the Ming emperors, hung himself upon this very tree, after having killed his wives and children, rather than submit to the victorious Manchu general, Taitsong. This tree, known as the Wry-necked Fir, was then chained up by order of Chuntehe, the first emperor of the existing imperial line; and although fallen to the ground, its remains, with the chain round them, are still shown.

As if in revenge for the unfortunate Mingo, the popular fancy has evolved another superstition out of Chuntehe's act, and it now passes as a current belief that if the chain were to be removed from the fallen trunk, some terrible catastrophe would happen to the Manchus. The Tsing dynasty is also not without its own peculiar tree, which was planted by Chuntehe in the court-yard of a temple at Tan-chessu, near Peking. So long as this tree exists, so long, it is asserted, will the Manchus remain supreme; and there are those who contend that the future before the ruler may be divined from its condition. The latest accounts are to the effect that this tree, which is of the white nut species, and which has already attained the respectable age of two centuries and a quarter, shows most striking signs of renewed vitality.

A RUSSIAN MAN OF ENTERPRISE.—The millionaire, Nicolai Ivanovitch Putiloff, who died a few days ago at St. Petersburg, was, in many respects, an excellent representative of a class of men indigenous to Russia. Up to the outbreak of the Crimean War he was simply a naval officer, devoted to his profession, but, at the same time, on the lookout for any short cut that might lead to fortune. The arrival of the allied fleet in the Baltic afforded him the chance he had long been waiting for. He obtained the contract for the construction of the gunboats that subsequently tried the temper of England so sorely, and within a couple of years had turned out at Cronstadt, by means of an elaborate system of piece-work, eighty-one gunboats and corvettes, provided with an aggregate of 10,000 horse-power, and armed with 297 guns of the largest caliber. After the war was over he went north and built three iron rolling-mills, worked by water-power, obtaining from the Finnish Government a mining monopoly over an area enclosing 385 lakes and 40,000 square miles. Transferring these to a company, he started with Obouchoff the huge "Obouchoff Steel Works" at St. Petersburg, and after receiving a large sum of money in the shape of subsidies, he sold the concern to the war department in 1873, by whose exertions half a dozen big guns have been turned out at a cost estimated by the *Novosti* the other day at a million and a half sterling. Putiloff's next enterprise was

the iron rolling-mills bearing his name, at the mouth of the Neva, where 5,000 men are employed and £640,000, besides 1,000 railway wagons. This little business was converted into a joint-stock concern four or five years ago, when Putiloff secured the contract for constructing the great sea canal from Cronstadt to St. Petersburg. Of the 7,500,000 roubles voted for the project, a large proportion is said to have already passed into the pockets of Putiloff and the government officials without either having done any thing to show for it. The Finnish rolling-mills long ago collapsed, the Obouchoff Steel Works is a by-word for a gigantic government job, the smash of the Putiloff Works is daily expected, and it is believed that the colossal fortune of Putiloff himself, ravaged by extravagance, will be found to be in as rotten a condition as the great sea canal scheme at St. Petersburg.

BIOGRAPHIES BY FOREIGN WRITERS.—We should not be surprised if the French "Life of Mozart," written by M. Victor Wilder, the well-known litterateur, and published a few weeks ago, were found to be upon the whole the most satisfactory biographical record of the great German composer, and this, in spite of the voluminous works compiled by his own countrymen. The fact is less surprising and less rare than would appear at first sight. Germans willingly admit that the best biography of Goethe is that by G. H. Lewes, and some Englishmen are polite enough to return a similar compliment to Professor Elze's "Life of Byron." And there is, indeed, no doubt that a foreigner has material advantages over one who stands to his hero in the position of an admiring countryman, and who from national and perhaps personal predilections is unable to distinguish between facts and mere local interest, and of general and permanent importance. It is, indeed, this last-named circumstance which makes the German biographies of Mozart so unsatisfactory. Nissen, the author of the first book worthy of such a name, was a Danish diplomatist, who married Mozart's widow, in order, it has been surmised, to become possessed of the materials for his work, which is accordingly full of letters and other valuable information, unfortunately ill arranged, and not always correctly dated. As a source of original information, his book, however, is, or at least was, of a

certain value, till it was superseded by the celebrated work of Otto Jahn. But in spite of his zeal and his ability, Jahn also has failed to give us any thing like a picture or a tangible idea of Mozart, the man and the artist.

MONTI CASSINO, PAST AND PRESENT.—The time was when the Benedictine monastery at Monte Cassino was the richest in Europe. Its abbot was the first baron of the kingdom of Naples, and the administrator of a diocese composed of thirty-seven parishes. Among its dependencies were four bishoprics, two principalities, twenty countships, 250 castles, 440 towns, 1,300 tracts of land, and 1,662 churches. At the close of the sixteenth century its revenues were valued at 500,000 ducats. To-day the monks of Monte Cassino have hardly enough to live. Their pensions from the Italian Government amount to the small sum of thirty francs a month, paper Italian francs, and equivalent to less than \$6.

POVERTY IN THE VATICAN.—The lady to whom young Pecci, the pope's nephew, was recently married, is the daughter of a rich Roman merchant. Being unable to obtain from his father the means necessary to set up an establishment befitting such a bride, the young man applied to his uncle. All that the pope could do for him was to give him 25,000 francs, and this sum he was obliged to borrow. Much talk was made in Rome of the meagreness of this provision, and when Leo heard the current gossip on the subject, he replied that he was truly sorry he could do no more, but matters with him were in a position such that he never had enough in the house for the needs of the day.

ANOTHER BRITISH JOB.—Such is the apparently assumed protectorate over Persia. It is amusing to see these two politicians, Gortschakoff and Beaconsfield, eye each other. No cat ever watched mouse half so closely as Johnny Bull is watching Dame Russia. But what shall come of it all? Turkestan has fallen a prey to General Kauffinan, and Merv is threatened by his advance force. Afghanistan must prove only a temporary and rather dangerous stopping-place, for the English soldiery pushed forward from India ostensibly to avenge an insult against the British crown, but really to establish a stronger border line, which now proves next to impossible.

What else, in the light of these circumstances, can the permitted occupation of Herat by Persian troops mean than that Beaconsfield has encouraged the shah to this step, and has promised to protect him against Russian aggressiveness? This Herat is a center of eastern trade on the western frontier of Afghanistan. It is within a few weeks' march of Merv, which lies in the neutral zone be-

tween Afghanistan and Bokhara, a vassal state of the northern power, and if the Russians take Merv, the possession of Herat by an ally of England is a partly desirable accomplishment. The only trouble is, such vast and complicated undertakings may prove rather expensive to the British treasury, and it remains to be seen whether this last game of Lord Beaconsfield is worth the candle.

ART.

THE RUSKIN MUSEUM.

THE museum founded by Mr. Ruskin at Sheffield is attracting art students not only from all parts of England, but from America, and it has become necessary to enlarge it. Crowded with precious stones, rare pictures, and valuable books, there is not much space for students; but Mr. Ruskin has drawn out a plan for the provision of a new wing, or a separate gallery, in which he intends to place a fine collection of prints and casts. The cost of extension is estimated at £500, which amount it is proposed to raise by subscriptions. The museum in course of formation by the St. George's Guild, especially for the use of artisan students of Sheffield and its neighborhood, is accessible to all. Mr. Ruskin says: "I am, of course, ready to receive subscriptions for St. George's work from outsiders, whether zealous or lukewarm, in such amounts as they think fit. At present I conceive that the proposed enlargements of our museum at Sheffield are an object with which more frank sympathy may be hoped for than with the agricultural business of the guild;" and that this is a correct conception is proved by the fact that subscriptions for the extension of the museum are being received from London and other places. "My casts from St. Mark's," Mr. Ruskin writes, "are lying in lavender, at least in tow, invisible and useless till I can build walls for them; and I think the British public would not regret giving me the means of placing and illuminating these rightly; and, in fine, here I am yet for a few years, I trust, at their service; ready to arrange such a museum for their artisans as they have not yet dreamed of; not dazzling nor overwhelming, but comfortable,

useful, and in such sort as smoke-cumbered skies may admit, though not on the outside otherwise decorated than with plain and easily-worked slabs of Derbyshire marble, with which I shall face the walls, making the interior a workingman's Bodleian library." The casts are from Venice, and have been made under Mr. Ruskin's own superintendency, by permission of the Italian Government. They are taken from sculptures that adorn the ducal palace and the cathedral of St. Mark's, chiseled between the ninth and the fourteenth centuries, and are very valuable contributions to art. The new gallery will also contain a painting of the west front of St. Mark's, a commission for which has been given by Mr. Ruskin, and the artist will receive £500 for his work. It was originally Mr. Ruskin's intention to extend the museum at his own cost, but subscription-lists are now lying at the local works, and there is little doubt the necessary amount will be obtained without difficulty.—*London Times*.

THE CARRARA MARBLE QUARRIES.

It is said that of the 94,367 tons exported in 1878 from the quarries of Carrara and Massa, Italy made use of 33,081, of which nearly 3,000 were worked and carved. The marble is embarked for foreign export on Italian vessels of small tonnage, eighty tons at most, and carried to Genoa and Livornia. Carrara has 387 quarries, 327 of which employ 36,050 workmen, besides 350 women and children who carry water to the workmen in the mountains. The establishments where the marble is carved and worked employ about 650 workmen. They contain eighty-five hydraulic saw-mills, worked by the Carrione. In and about Carrara itself

there are 147 studios and an academy of fine arts. The wages of the workmen vary from one franc and eight centimes for the quarrymen, to four-and-a-half and six francs for the sculptors. The Carrara and Massa marbles are of several varieties, namely, statuary marble, veined marble, *bardiglio*, and pure white. The first quality of statuary marble costs from 300 to 1,600 francs per cubic metre; the second quality costs from 250 to 550 francs; the veined costs from 150 to 550; the *bardiglio* from 190 to 280; the first quality of clear white from 250 to 280, and the second quality, 180.

STRENGTH VERSUS ORNAMENT.

THE present tendencies towards the revival of the English styles in the architecture of our dwellings, as well as in public buildings, have in them some dangers against which we should carefully guard. The temptation to exhaust our energies upon surface detail and ornamentation has become so strong that we are now in danger of sacrificing the grander and broader principles of architecture to the mere accessories of this noble art. The unity of design is lost in the multitude of details. The eye is confused amid the intricacies of the work; the mind finds no broad expanses to give it rest and quiet; the grandeur of the whole is smothered under the incubus of the members. It is, therefore, with pleasure that we give the following statements from a paper read by Mr. E. Ingress Bell at a late meeting of the Architectural Association:

To put the main theory which I am combating to a practical test, let us apply it to those glorious Cistercian abbeys whose ruins adorn our land. The rule of their founders, as you know, forbade the introduction of ornament, and all that carving and illusive imagery which Mr. Ruskin says is the "all in all," was conspicuous by its absence, nor were those precious marbles used which he says are the only reliable substitute. Yet successive generations have borne testimony to the beauty and impressiveness of those exquisite works. It is idle to dispute about mere words—whether this be architecture, as we understand it, or "frame-making." It is the quality which we all should desire to emulate. What is it which impresses us on entering the nave of Canterbury or Durham or Chichester or Southwell Minster? Not the cushioned capitals

more or less rude or ornate, nor the ruder attempts at surface ornament in the tympana of the triforium arches. Before we have time to peer into these, be they never so lovely, the power and majesty of the whole work falls upon us like a spell, and awes us into reverence. Something, no doubt, is due to mere age, something to religion and mere historical associations. We are, nevertheless, by no means regardless of its general size and form. The "frame-making" on a large scale has done its work as nothing in the world besides could have done it, and the human mind is more amenable to its divine silences than to the eloquence of all the carving in the world. But we have nowadays, as the early leaders had not, other teachers, multitudes of channels in which the stream of learning flows, endless appeals to our intellect and to our heart. But amongst all the resources for the elevation of the human mind, and amongst all the appeals to our imagination, there is still none so potent and so sure as that afforded by grand and noble architecture. To this grandeur and nobility I submit that mere excellence of detail contributes only in a secondary manner, and that in restricting our attention to it we run in danger of missing ends of immeasurably greater importance. May I adduce, in illustration of my general position, a "modern instance," which combines great wealth of details with masterly grouping and general arrangement, and endeavor to assess the part played by each element in the general result? I refer, as you may guess, to the Houses of Parliament. I have always admired that building, and still think that, in spite of the hostile criticism with which it has been assailed, the new palace at Westminster is, on the whole, the most satisfactory secular building which the Gothic revival produced. Yet one can never pass it without wishing that its great architect had left us some spaces of repose on its enriched fronts, some quiet pauses in the restless pagantry of its façades. Who, for instance, would not wish away from the clock-tower all that gilding and frippery which vulgarize its summit, reduce its apparent height, and compromise its dignity by destroying its simplicity? Would not the whole structure benefit by the removal of half the cresting and brattishing, the wearisome iteration of paneled surface,

and the multitude of small prettiness which crowd every part of it from base to summit? As a consequence, we never quite know whether we like it or not. We discuss it, and argue about it, and hesitate to express a definite opinion. There is statuary and there are floral moldings enough in all conscience, but of these it can not be said that they are "intensely observant." Without reviving a buried controversy, one may safely say, that if the hand of Pugin appears at all in the work, it is in the details, and that as a composition it bears unmistakable marks of the genius of Barry. The value of the details diminishes every day, and we pass them by as a matter of course. The pretty parts of the building are, moreover, perishable parts, and already the crockets and finials are dropping away in decay; the vanes are dangling in shreds about the pinnacles, but the artistic skill, evident in the general arrangement of building, as a whole, forms an element of permanent value, and as long as the river flows will appeal to the imagination with a force which the fluctuating fashions of the day can not disturb or diminish. We do regard its general form and size, and herein lies its real power. We are charmed, in spite of the interstices, by its varied sky-line, by its "Crown of Towers," by the play of light and shade, the heightened *chiaroscuro* which the opacity of a London atmosphere imparts to a building so picturesquely varied in outline and mass, and of such considerable extent. . . . In any case we should keep well before us the advice of Sir Joshua Reynolds and the examples of the successful works of our ancestors. I know, of course, how easy it is to prescribe and how difficult it is to achieve. It is something, however, towards arriving at the goal if we feel sure that we are on the right road; such a road is to be found, I think, in the considerations I have ventured to urge on your attention. In conclusion, I am happy in being able to quote a stray passage from the most distinguished art-critic and brilliant writer of the day. You will recognize the incomparable style, and you will, I hope, indorse the sentiment embodied. "While it is not to be supposed," he says, "that mere size will ennoble a mean design, yet every increase of magnitude will bestow upon it a certain degree of nobleness. So that it is well to deter-

mine at first whether the building is to be markedly beautiful or markedly sublime, and if the latter, not to be withheld by respect for smaller parts from reaching largeness of scale. Let the architect who has not large resources (and I should be tempted to add, also, let him who has) choose his point of attack, and if he choose size, let him abandon decoration; for unless they are concentrated, and numerous enough to make their concentration conspicuous, all his ornaments together will not be worth one large stone. And the choice must be a decided one, and without compromise. It must be no question whether his capitals would not look better with a little carving; let him leave them huge blocks; or whether his arches should not have richer architraves; let him throw them a foot higher. A yard more across the nave will be worth more than a tessellated pavement, and another fathom of outer wall than an army of pinnacles."

ART NEWS.

Brumidi.—It is believed that Signor Filippo Castaglini, of New York, will be appointed to carry out the unfinished work of Brumidi in the rotunda at Washington. He was a personal friend of the late Signor Brumidi, who, before he died, expressed the wish that the completion of his work might be intrusted to his countryman.

Cologne Cathedral.—While one party of workmen is busily completing the summit of the south tower of Cologne cathedral another party is equally active in renewing the foundation of the same tower. This race between progress and decay is going on in other parts of the building, so that it looks as if the cathedral, even if it does not fall into complete decay, would never be delivered from the sound of the mason's chisel and stone-plane. However, the stone roof of the north tower is now in place, and rises above the surrounding scaffolding.

The Tuileries.—It is well known that the Tuileries Palace suffered terribly during the reign of the Commune. Just what to do with it has been the problem. Some have suggested that the ruins be permitted to remain as a reminder to the Parisians of the folly of anarchy in government. But it seems that the commission to whom was intrusted the business

has unanimously decided to restore the palace, since this was considered less expensive than reconstruction. This has been done with the express understanding that the palace shall be used as a museum. M. Lefuel, the architect in charge of the Louvre, has been directed to prepare plans and estimates.

Musical Profits.—The recent enormous ventures of the great musical associations in Boston and Cincinnati demonstrate the fact that the American people will generously patronize a good thing, even when that good thing is of the highest classical character. It has been thoughtlessly remarked that high, classical music can get few listeners. This has been proved to be a mistake. Never in the history of musical entertainments has a higher key been struck than during the recent musical festivals of the East and West, and never has the patronage been so hearty and appreciative. The Handel and Haydn Society of Boston at their recent meeting found that their treasury had

been benefited thirty-three hundred dollars during the past year; that one thousand dollars worth of music had been added to their library, and five hundred dollars more in the treasury. The musical association of Cincinnati had a very wide margin of receipts over expenditures—enough, it is said, to pay off the debt of fifteen thousand dollars on the great organ, and leave a pleasant nest-egg besides.

Mr. Mason in Japan.—It is gratifying to observe that Mr. L. W. Mason, formerly supervisor of music in the public schools in Boston, has met with a most hearty reception by the governmental authorities of Japan. A building has been erected for his special use, and it is proposed to connect his school with the national system of instruction. While the difficulties of his undertaking are very great, Mr. Mason expresses the hope that the education of that nation in music may be thoroughly revolutionized.

NATURE.

SUPPOSED CHANGES IN THE MOON.—Two years ago those astronomers who take especial interest in observing the moon, were startled by the announcement by a German astronomer, Dr. Klein, of a remarkable change on the lunar surface, due to the sudden formation of a great black crater, over three miles in diameter. This new formation was stated to have appeared in a comparatively open region of the moon, near the great valley rill of Hyginus. A full account of the early history of this supposed case of a real lunar change was largely published at the time. The great interest of the announcement lay in the fact that, according to opinions generally held by astronomers, all active change on the lunar surface had long ago died away; though, on the other hand, there have been few, if any, of these astronomers who have devoted much time to study of this subject, who have not strongly expressed their dissent from this opinion. It so happened that this particular region of the moon has been especially well studied and has been frequently drawn, and within very recent times. It was therefore

recognized that this reported change, if confirmed, would afford a crucial confirmation of the view that real changes of great magnitude are still occurring on the lunar surface. If this is so, then at any moment the moon may present us with the opportunity of studying a great volcanic eruption, covering the surface for miles with lava and filling the surrounding region with clouds of ashes. Even if no volcanic action were to take place, at any moment a grand landslide might occur, presenting a magnificent spectacle. There can be no-doubt that the establishment of a single case of lunar activity would greatly increase the charm and value of the study given our satellite. The first observation of this supposed new formation was made a year ago, but under such unfavorable circumstances that nothing definite could be determined. Every thing is now changed, and at the present moment it is possible to arrive at a definite conclusion about the remarkable formation first observed by Dr. Klein, and named "Hyginus N," by the authority of the Selenographical Society. During March and April

it was observed and drawn by Dr. Neison, who at once recognized it as a great, conspicuous object, which was certainly not visible when he had drawn this region on many occasions between 1871 and 1876. Many other astronomers made drawings, all of which corresponded with each other, thus verifying the accuracy of the various observations. There can be, therefore, no longer any doubt about the actual existence in this region of a great, black, crater-like formation, formed within the past few years.

CAUSE OF ARIDITY.—The mechanical causes of all terrestrial currents of air or winds must be sought for in the disturbance of atmospheric equilibrium produced by the unequal distribution of solar heat on the surface of the globe. Solar heat must, therefore, be looked upon as the "*primum mobile*," which originates and keeps in continual action the agencies which perpetuate the atmospheric circulation. In other words, the action of solar heat, combined with the very important modifications produced by the rotation of the earth on its axis, affords a full and satisfactory explanation, at least in a general view, of the great systems of winds. The operation of this physical cause necessitates the general prevalence of west winds near the surface of the earth in the temperate zone. The great water surfaces are the chief sources whence the largest supply of moisture in the form of aqueous vapor is derived. The winds are the chief mechanical agents by which those vapors are wafted to distant points where they are condensed into rain or snow, dropping fertility on our fields, and covering our hills and mountain slopes with verdure. The land is directly or indirectly the agent which brings about the condensation of aqueous vapor. It accomplishes this result, either (as in the case of winds carrying vapors up mountain slopes) by forcing the vapors into higher and colder regions, or by creating upward currents of air by the action of solar heat, and thus conveying the vapors aloft into the colder altitudes. Thus, in a general sense, the ocean, seas, and lakes, constitute a vast vapor furnishing apparatus, while the continents and islands constitute a huge condensing machine; between them a gigantic process of distillation is carried on, which waters the earth and clothes the land

with vegetation. Moreover, it must not be forgotten that the great thermal influence emanating from the sun alone has the power of putting in motion this immense apparatus. For the western portions of our land the Pacific Ocean constitutes the great vapor furnishing surface; the prevailing west winds sweep the vapors upon the lands lying to the east of the ocean, and the mountain ranges furnish the condensing apparatus. It is evident, therefore, that all aqueous phenomena of the atmosphere, embracing fog, rain, and snow, may be rationally accounted for by attending to the three following considerations: The position of bodies of water furnishing moisture, the direction of the winds sweeping over them, and the configuration of adjacent and remote land.

ARTIFICIAL DIAMONDS.—Great interest has been excited in England during the last few months by several reports of the artificial manufacture of the diamond. The earlier announcements appear to have been founded on error, but success seems at length to have attended the labors of Mr. Hannay of Glasgow. The method adopted is by taking advantage of the affinity displayed by hydrogen for certain metals, especially magnesium, at a very high temperature, forming extremely stable compounds with them. When carbon is by this means set free from a hydro-carbon in presence of a stable compound, containing nitrogen, the whole being near a red heat and under a very high pressure, the carbon is so acted on by the nitrogen compound, that it is obtained in the clear transparent form of the diamond. The carbon thus obtained is as hard as the natural diamond with a specific gravity ranging as high as three and five-tenths, scratching all other crystals and not affecting polarized light. Mr. Hannay obtained crystals with curved faces belonging to the octohedral form, the diamond being the only substance that crystallizes in this manner. The crystals burn easily on thin platinum foil over a good blowpipe, and leave no residue, and after two days' immersion in hydro-fluoric acid, they show no signs of dissolving, even when boiled. On heating a splinter in the electric arc, they burn black, a very characteristic reaction of the diamond. Mr. N. S. Maskelyne, F. R. S., the keeper of the miner-

alogical collection at the British Museum, confirms the statements that the crystals sent him by Mr. Hannay possess all the properties of the diamond. Mr. Hannay has written to the London papers to allay the fears of diamond merchants as to a possible heavy fall in the value of diamonds, stating that the process is so expensive that it will probably never amount to more than a laboratory experiment. The great difficulty lies in the construction of an inclosing vessel strong enough to withstand the enormous pressure and high temperature, tubes constructed on the gun-barrel principle, with a wrought iron coil, of only half an inch bore, and four inches external diameter, being in nine cases out of ten torn open.

WHY THE NEEDLE POINTS NORTHERLY.—

The reason why the needle points in the northerly direction is that the earth is itself a magnet, attracting the magnetic needle as ordinary magnets do; and the earth is a magnet as the result of certain cosmical facts much affected by the action of the sun. The laws governing these facts have periodicities, all of which have not yet been determined. The inherent and ultimate reason for the existence of any fact in nature, as gravity, light, heat, etc., is not known further than that it is in harmony with all facts in nature; even an earthquake is in perfect harmony with, and the direct resultant of, the action of forces acting under general laws. A condensed explanation in regard to the needle pointing northward and southward is as follows: The magnetic poles of the earth do not coincide with the geographical poles. The action of rotation makes an angle of about 23° , with a line joining the former. The northern magnetic pole is at present near the Arctic circle, on the meridian of Omaha. Hence the needle does not every-where point to the astronomical north, and is constantly variable within certain limits. At San Francisco it points about 17° to the east of north, and at Calais, Maine, as much to the west. At the northern magnetic pole a balanced needle points with its north end downward in a plumb line; at San Francisco it dips about 63° , and at the southern magnetic pole the south end points directly down. The action of the earth upon a magnetic needle at its surface is of about the same force as that of a hard steel magnet,

forty inches long, strongly magnetized, at a distance of one foot. The foregoing is the accepted explanation of these facts regarding the needle.

THE DESERT OF SAHARA.—A recent letter, written from the oasis of Tafilet, in the Sahara, says that so far from being a desolate plain of moving sand, as popularly believed, the Sahara is a cultivated country, fruitful as the Garden of Eden. Like our "Great American Desert," it has been greatly belied. El Sahr, as the Arabs pronounce it, is indeed a vast archipelago of oases, offering an animated group of towns and villages. A large belt of fruit trees surrounds each of these villages, and the palm, fig, date, apricot, pomegranate, and vines abound in utmost profusion. Ascending the Atlas Mountains by a gradual slope to the region of high table-lands, we come to the land of the Mozabites, and then comes a gradual descent for three hundred miles to the vast stretch of country known as the great desert. The rivers have an inclination of about one foot in four hundred. Many of the streams are dry, except after rains, when they deluge the country. Gun-shots are fired as soon as the coming torrent is discovered, all portable objects are removed from its path, and soon, with a terrible noise, the flood rolls on. The Saharian city stands as if by magic on the banks of the waters which rise to the tufts of the palm trees; but a few days only elapse ere the river disappears, leaving the district rich and fruitful. The inhabitants are not a migratory people, and, unlike the tent-dwellers of the northern slope, live in substantial houses with thatched roofs, and ceilings of cane. The walls are whitewashed, and inscribed with verses from the Koran. The inhabitants are made up of genuine Arabs and Berbers; also Jews are found in every oasis.

THE HUMAN RETINA.—In a recent note to the Vienna Academy, Herr Salzer offers an estimate, based on numeration, of the probable number of optic nerve fibers and of retinal cones in a human eye. The number of the former he supposes to be about 438,000, that of the latter 3,360,000. This gives seven or eight cones for each nerve fiber, supposing all fibers of the optic nerve to be connected with cones, and equally distributed among them.

RELIGIOUS.

TOBACCO IN THE MINISTRY.—The Boston *Congregationalist* takes the recent Methodist General Conference to task for the enactment against the use of tobacco in the following strong language, which, after all, only shows how others see us: "Whatever the brethren may have thought in the matter, they ought to have been consistent in their action. What they did was to decree that the use of tobacco shall be forbidden hereafter to candidates for the Methodist ministry. What they should have done was to leave the subject to the individual conscience, where it properly belongs, or else to prohibit their whole ministry, old and young alike, veterans and candidates, from the bishops down, from using it. If it be wrong for the candidates, it is especially wrong for the seniors." And here comes the New York *Examiner and Chronicle*, and adds another word in equally strong language: "Probably a great many people who do not use tobacco themselves, nor regard favorably its use by others, will, all the same, think it rather absurd for a denomination, or any part of a denomination, to make such use the proof of a man's unfitness to preach the Gospel, and the sufficient cause for his rejection by a conference as a candidate for ordination." Question: Do all these editors use tobacco? It looks as though they might be addicted to the weed.

RENAN'S LONDON LECTURES.—Writing of Renan's recent London lectures, the *Independent* says: "Christianity has been patronized before now by many men, but no man takes it on his knee like M. Renan, chucks it under the chin, sticks his finger in its dimples, twists its curls, and calls it a sweet, simple maid. Christianity ought to feel very much flattered that so great a scholar as M. Renan thinks it so beautiful. He is really charmed with the sweet Galilean vision which appeared amid the lilies and roses about fair Tiberias. It is not only a sweet tale, but M. Renan is quite inclined to confess that there may be some truth in it. Of course the miracles, the resurrection, the ascension, are not—well, on those charming products of a credulous, legend-lov-

ing Oriental people we need not speak; but we may own that there may be a great element of truth in Christianity. Very likely there is a God. We may even hope that there is a future life. M. Renan says he really thinks there is, and we are all very much encouraged to know it. How good of him! We confess this is about all we can make out of his five lectures in London."

KALLOCH RIGHT IN ONE THING.—Whatever his opinions on the Chinese question in general, Mr. Mayor Kalloch is decidedly not opposed to missionary work among them, and therein, on certain grounds, he is consistent and eminently Christian in spirit. If the Chinese are to stay, the very men who have tried to get them out of the country should encourage all efforts to make them good citizens and agreeable neighbors. Mayor Kalloch avowed his position on this point at the California Baptist State Convention, where one of the speakers arraigned him with reference to his incendiary language on the sand lots as directly against mission work among the Chinese. Kalloch's reply was, that he had never spoken an unkind word of the Chinese, and would work as heartily as any one to save and convert them, and proposed that steps be taken at once in the convention to raise money for mission work among them.

A COMPARISON WELL WORTH MAKING.—Says the Boston *Congregationalist*: "To hear Colonel Ingersoll blaspheme his Maker through two long hours and a quarter in a New York theater the other evening, two dollars apiece were given by crowds of men. They would have railed themselves hoarse over the exorbitance of a Church that would charge that sum per month for the rent of a pew in God's house for themselves and their families; and over the minister who should presume to preach more than thirty minutes. And with what refreshing innocence does this apostle of atheism unroll the wealth of the Unabridged in vituperation at the 'priestcraft that robs the poor' for the support of pastors toiling through a year to help men upward, on less money than he absorbs in a single evening, by

dragging men downwards. Consistency is a jewel after all."

WHAT CLERGYMEN LIKE AND DISLIKE.—"The truth is," said Mr. Hale in his speech at the Montana Festival, "we like to preach short sermons just as much as you like to hear us; but if you want to have the sermons short, you must look out for your own sins, for we have got to name them all before we come to the application, and the length of the sermon depends entirely upon yourselves. There is a real impression afloat that ministers dislike what is called the parochial part of their business. There is an impression, really, that they do n't like visiting. The truth is, that it is the one satisfaction, it is the one thing that keeps us alive."

CANON FARRAR ON POLITICS.—Canon Farrar recently preached a sermon in Westminster Abbey on "Religion and Politics," which is applicable to this side of the Atlantic as it is to that of Northern Europe. The learned divine said: "If ever, through the fault or feebleness of us, the clergy, Englishmen begin to regard religion as a sort of conventional theory, as a set of abstract dogmas, as a mixture of party watchwords and decent observances; if ever we drive men to the disastrous conclusion that religious exhortations have little concern with political and social life; that they may do for Churches, but have no connection with the shop or office; that they may do for Sunday, but are unworkable on ordinary days; that they may concern the clergy and their adherents, but have little to say to the city or to the nation; whenever, in fact, the religious and the secular are regarded as two distinct and separate spheres, and the truths of religion as a set of phrases current among the elect, but meaningless to the vast masses of unregenerated mankind,—then farewell to the true power and glory of the Christian faith."

GREGORIAN FESTIVAL.—At the annual Gregorian festival, held recently in London, it being the eighth, the congregation was very large, filling the cathedral of St. Paul's in every part. The portion under the dome was so crowded that ladies were unable to remain, owing to the heat. The choir numbered upwards of twelve hundred and forty, and there were one hundred and fifty clergymen present.

PROTESTANT MISSIONS IN SPAIN.—Quite a change has occurred in the relations of Protestant missions in Spain. Cabrera, formerly a priest, embraced Protestantism in 1861, at Gibraltar, and was, one year later, installed as pastor under the auspices of the Scotch Presbyterian Society. In 1868 he was called to Seville, and in 1874 to Madrid, to succeed the lamented Carrasco. Last year the Scotch Society reduced its appropriation for the support of Cabrera from fifteen hundred dollars to nine hundred dollars. Feeling aggrieved, Cabrera determined to relieve his Church from the patronage of that society, and turned to the English Episcopal Committee. Last February he published a pamphlet proposing to the young Spanish Churches that they organize on the model of the Protestant Episcopal Churches of the United States; and in March he met at Seville the four Spanish pastors, who depend on the Episcopal Committee, and also Bishop Riley, the American bishop of the Mexican Episcopal Church, and was by them elected "the first bishop" of Spain. He now proposes to erect in Madrid a beautiful Protestant cathedral, and to organize his diocese.

A NOVELIST CONVERTED.—A London correspondent of the *Independent* announces the conversion of the English novelist, Charles Reade, from Rationalism to Congregationalism. Mr. Reade now attends regularly the Shepherd's Bush Congregational Church in London. The correspondent adds: "What Mr. Reade will do for the future, is an interesting inquiry. Since his conversion he has prepared very copious notes of his autobiography. I understand, also, that he is meditating a delineation of Scripture characters and events. His pen can not be at rest; and, now that he is 'converted,' the world may ere long hear from Charles Reade upon themes to which they are unaccustomed under his guidance."

PRESBYTERIANISM IN CITIES.—New York city has twenty-six Presbyterian churches—exactly the number it had thirty years ago, when the population was half a million souls. The *Interior* tells us that there are now fewer Presbyterian churches in Chicago than there were ten years ago; while Cincinnati is in a worse condition than it was thirty years ago.

THE QUAKERS.—The Society of Friends is, it seems, the religious denomination which is, in proportion to its numbers (thirteen thousand), the best represented in Parliament, there being no fewer than eleven Quakers in the new House of Commons.

RITUALISM.—The *London Times* expresses the belief that extreme ritualism has ceased to possess the vitality which marked it ten or twenty years ago. It says: "Other movements of vastly greater interest have taken its place, and the thoughts both of men and of women within the Church are occupied with very different questions from those of the proper vestments and gestures of a priest. The good sense of the clergy and the laity now induces them to direct attention to the more important questions in which the welfare of the Church is involved. Recent events have greatly encouraged the Nonconformists, and the improvement of their prospects causes all who uphold the vagaries of socialism, communism, and the rationalism of the German universities to strive more earnestly for the propagation of their doctrines. The chaos of opinion which exists in the minds of many of

the inhabitants of England, and the freedom of expression, gives abundant work to all who desire to sustain correct principles of religion and morality."

SUNDAY-SCHOOLS IN ENGLAND.—At a convention held in London a short time ago, to consider plans for celebrating the centenary of Sunday-schools, about two hundred ministers of various denominations were present. Sir Charles Reed, in reviewing the history of the schools, said the English census of 1851 showed that 250,000 teachers were engaged in the gratuitous instruction of the young, and that they had a total of 1,108,000 children in their charge. This year the Sunday-school Union alone was able to report no fewer than a million children within its organization, while in addition there are to be reckoned the children in schools belonging to the Wesleyan body and to the Church of England.

EBENEZER MORGAN, a retired sea-captain, living in New London, Connecticut, has given twenty-five thousand dollars to the fund in aid of the translation of the Bible into different languages for use by missionaries.

CURIOUS AND USEFUL.

MEN OF GENIUS SMALL IN STATURE.—A writer of *Baldwin's Monthly* has recently taken it upon herself to inquire into the peculiar freaks of nature in men of genius. One of the very first points this writer makes is that men of genius are generally of small size. This is a painful statement to make, for one naturally connects great deeds with a lofty presence. The ancient writers looked upon them as inseparable; it is ever the Achilles, the Hercules, and the Theseus that charmed the mind. The ridicule of Addison, in modern times, was powerless against this belief, and even the genius of Garrick dared not play Hamlet without an extra inch of leather on his heels, while Johnson felt himself almost bound to apologize for Milton not being "of heroic stature." Yet history tells us that the masters of the intellectual world were, as a rule, small men physically; the

divine afflatus is not to be lodged in an ample tenement of clay. Paracelsus, judging from his skull, was not much bigger than a boy; Harvey, the discoverer of the circulation of the blood, was "very small in stature;" Newton, like Plato, was stout, short, and compact; Voltaire was puny and thin; Pope was a little, weakly being, and so low in stature that his chair had to be raised in order to bring him to a level with the common tables; Moore was a "little, a very little man." Even where great abilities abide in a bulky habitation of flesh and blood, there have generally been great drawbacks attached. Ariosto, Johnson, and Scott, were three burly fellows; but Johnson shook and rolled like a jelly-fish; Scott was paralyzed from childhood, and Ariosto was ill-made; even Byron, who was of fair stature and beautiful face, was lame. Leaving the intellectual rulers

for military geniuses, we find the same rule holds good. Napoleon, a handsome man, was short and squat; Nelson little bigger than a boy; Conde and Suwarrow were both small, and Wellington only of medium height. Caesar certainly was tall in stature, but he had no hair on his chin, and very little on his head. Alfred the Great was a big man, but weakly from his cradle to his grave; and though Alexander's beauty has been extolled, we know that he was both small and wry-necked. However, though "little bodies lodge a mighty mind," the little body is often tough enough to last a long life. Young men of great promise have died young, but true genius is of better stuff. Voltaire and Fontenelle were both born in an apparently dying condition, yet one died in his eighty-fifth year, and the other in his one hundredth. The long lives of men of genius have become proverbial, and we have only to remember the hale old age of the best spirits of our own day to indorse it.

A GRACEFUL TRIBUTE.—In Auerbach's novel, "Brigitta," which is publishing, Brigitta relates some incidents which occurred while she was a nurse at the Ophthalmic Hospital at Zurich. "For nearly seven years I have nursed Protestants, Catholics, Jews, and infidels, princes who sleep under silk coverlets, and have hands as fine as the skin of eggs, and those vagabonds who have never known in their whole life-long what a bed is. Much is learned in the gratitude which people evince after cure, and I must say that the Jews in this respect are particularly good. The professor says, too, that a Jew does not easily forget the good done to him. Truly compassionate are the Jews, and they have sympathy with each other, but as said, they are particularly grateful. Once upon a time three ministers were together at the hospital, a Catholic, a Lutheran, and a Jew. Our Lord God had to hear how differently they prayed to him. The Christians were healed, the Jew not. When it was finally told to him, he said: 'Praised be God, who has allowed me to see so many years. I know our Bible by heart, and can read in it without my eyes.' He thanked us heartily for the patience and love we had shown towards him. To the professor he said, 'You had good intentions, but God has willed it otherwise for me. He will know why.'"

TRAITS OF OVERWORKED MEN.—Nothing could have been kinder, for example, than the kindness shown by Vinet, at Lausanne, to a peasant woman who invaded his solitude one Sunday morning. Overcome by toil and illness, Vinet had been obliged to forbid the visits of strangers, and his family were guarding him with all possible care. The woman, who was an intelligent, God-fearing peasant, who had never succeeded in getting rest for her spirit; but having fallen in with one of Vinet's books, she was persuaded that if she could only see him, he would be able to give her the needed guidance. With much difficulty she got admission to his room. We can fancy the anxious relatives enjoining her to detain him as short a time as possible. But Vinet, when he heard her story, was profoundly interested, and spent the whole day with her, up to the hour of the last stage-coach. The account which the woman gave to her own pastor, on returning home, is well worth relating: "Well," said the pastor, "have you been able to see him?" "Yes," she replied, "and at last I have found one who has humbled me." "Humbled you! M. Vinet is not the man to humble any one." "Yes, humbled me profoundly. In contact with his humility and goodness, I felt all my pride give way." Then she told how thoroughly he comprehended her case, how patiently he spent the whole day with her, and all in such a homely way, that she felt as if he were her brother. A few days after Vinet sent her a book newly published, as if she had been one of his chosen friends. Pastor Vinet, the illustrious French theologian, was truly great, and of him the poet might well sing:

"In joys, in grief, in triumphs, in retreat,
Great always, without aiming to be great."

WAS SHYLOCK A JEW?—An interesting contribution has been made by the Cologne *Zeitung* to the old question, Was Shylock a Jew? A writer in that paper has discovered in the eleventh book of Gregorio Leti's "Life of Pope Sixtus V," a story to the following effect: Ten years before the probable date of the production of Shakespeare's play a Roman merchant, named Paul Maria Secchi, and who was a good Catholic Christian, learned that Sir Francis Drake had conquered San Do-

mingo. He imparted his news to a Jewish trader, Simeon Canada, who either disbelieved it, or had an interest in making it appear so, and obstinately contested the truth of the merchant's statement. To emphasize his contradiction, he added he would stake a pound weight of his flesh on the contrary. The Christian took him at his word, staking 1,000 scudi against the pound of flesh, and the bet was attested by two witnesses. On the truth of Drake's conquest being confirmed, the Christian demanded the fulfillment of the wager. In vain the Jew offered money instead of the stake he agreed to, and finally appealed to the governor. The governor appealed to the pope, who sentenced them both to the galleys, a punishment they were allowed to make up for by a payment of 2,000 scudi each to the Hospital of the Sixtine Bridge. Leti's "Life of Sixtus V" was published in 1669, at Lausanne. Catholic writers have never looked upon it with any favor, but whether a trustworthy history or not, this story is curious.

WAS TOM PAINE A PATRIOT?—The Rev. E. P. Goodwin, D. D., in a sermon published in *The Advance*, makes havoc of the claims of Thomas Paine's admirers that he bore a conspicuous part in securing our national independence. Paine, Dr. Goodwin says, having lost his place in England as an exciseman, came to this country without any political purpose. Upon his arrival, through the influence of Franklin's son-in-law, Bache, Paine obtained employment as the editor of a magazine. He had been in the country a year before he published his pamphlet advocating an independent republic. This tract, according to Bancroft, was written at the suggestion of Dr. Franklin. But the idea of a declaration of independence was not original with Paine. Such a movement had before been suggested by Samuel Adams, by Jefferson, and notably by Abigail Adams, the wife of John. The pamphlet of Paine was a clear and vigorous expression of the popular feeling, but it was no more.

A POET'S ODD MANIA.—M. Victor Menier, in a scientific article recently contributed to the Parisian *Rappel*, gives some curious instances of mania which show themselves from time to time in persons who are otherwise sane and reasonable. Among others is that of a

distinguished individual in Paris, a poet and savant well known for his amiable disposition and sociable instincts. There are, however, moments in his life in which he has an almost irresistible desire to kill some one, though without the slightest malice or provocation, and his only resource is to hasten to the chief of a *maison de santé* at the Faubourg St. Antoine, and present his two thumbs to be immediately tied together with a piece of ribbon, which has the instant effect of allaying the murderous impulses and restoring him to his right mind. It is said that this gentleman is writing a series descriptive of the symptoms and trains of thought, which lead up to so strange a mental phenomenon.

A CURIOUS WAY OF PRACTISING ECONOMY.—Mr. W. I. Fitzpatrick tells a good story of the way in which Lever, the novelist, endeavored to put into practice Thackeray's advice to him in favor of thrift. That counsel was to begin with small economies, and to stop some one trifling expense that he could very well do without, when he would find the taste for saving would grow on him, and gradually include many things once thought necessary. Accordingly, Lever determined to save the daily franc he gave a poor man for holding his pony at the door of a pistol-gallery where he was accustomed to practice; the thought of stopping the practice itself never seems to have struck him. He tied the bridle to the hook of the window-shutters and went in. His first shot hit the center, and set a signal-bell ringing loudly, which so frightened the pony that it broke away, carrying the window-pane with him. "The repairs," wrote Lever, "amounted to eighty-seven francs, and more ridiculous than I am able to set down. This was my first and last attempt at economy."

CURIOUS LOVE OF BOOKS.—Mr. Ryan, librarian of the Kilkenny Library Society, made books his idols, denying himself every luxury, and not a few necessities, in order to add to his collection, the well-furnished library of which he was custodian being insufficient to satisfy his literary cravings. He lived in the upper part of the society's premises, but permitted no one to enter his rooms for any purpose whatever. On his sudden death, in 1866, their privacy was perforce invaded. His bed-

room, or what passed for such, was found to contain nothing in the way of furniture, save an old sofa, which had served him for a bed, upon which lay a pair of old blankets, his sole nightly covering. Piles of books were heaped up promiscuously in every direction. So in his sitting-room, there was scarcely space to move for dust-covered volumes of which the owner had apparently made very little use, contented, like many another collector, with merely having acquired them.

QUEER FISH.—At Monterey some fishermen caught it in a seine. It was about nine inches long. The first half of the fish was a mountain brook trout, having the eye, head, scales, spots, and shape of that fish. It had a pair of fins at the usual place behind the gills; an inch or two back of this it suddenly changed into a silver eel, the shape, color, and absence of scales being perfect. It will probably find a resting-place on the shelves of the San Francisco Academy of Sciences.

LITERATURE.

DR. HORACE BUSHNELL by a variety of means won for himself a name that survives him, and, indeed, achieved a renown that will characterize him during the life-time of those who either knew him personally or may have read his published works. And to all such his memoirs,* compiled by a competent hand and a loving heart, will prove acceptable. Many others, too, may be beguiled to read them, and by so doing will reap both profit and enjoyment, for the book is decidedly enjoyable. Dr. Bushnell was in many things a remarkable man; sufficiently various in character to save him from being simply commonplace, and yet with a decided preponderance on the side of the good and excellent. As a man he was strongly individualized, having his own thoughts and his own methods of expressing them; incapable of treading the well-worn paths of the fathers simply because others had gone that way, and quite too loyal to his own convictions to sacrifice them at the demands of any human authority. And from that cause came his public reputation and the esteem of his admirers, and also the distrust of some of the good men of his own times. And now that he has been dead these ten years, having been preceded into the spirit world by most of those who antagonized him while living, his survivors consent to think kindly of him, and to remember only his excellences.

He was, no doubt, a man of real abilities,

an able preacher, a warm-hearted and zealous pastor, and a writer of marked character; and whatever may be thought of his doctrinal teachings, it will be confessed that he reasoned skillfully and expressed his thoughts with marked aptness and force. But his cast of mind was peculiar, and sometimes its various traits seemed out of harmony among themselves. Sometimes he would seem to incline very far towards a simply intellectual rationalism, and again he would show traits of a kind of dreamy mysticism. The mysteries of the atonement in Christ were a perpetual stumbling-block to his faith; and yet he could accept almost blindly stories of the supernatural in ordinary affairs. Christ, as a proper sacrifice and as a judge, he seemed incapable of appreciating; but Christ as a friend and a brother was ever present to his sympathies. His writings show their decided excellences; and yet, because they are most likely to be read by those who may least need their peculiar influence—while those who would most profit by them will probably read them least—there may be some doubt whether they are not more harmful than profitable. But no such qualified indorsement need be given to his memoirs, in which the personal excellences of the man are brought out in bold relief in the record of his life work, and still more strikingly in his private letters. Those who knew the living subject will rejoice to possess such a memorial of the man they loved; and many others may also rejoice herein to contemplate a noble and virtuous character.

***LIFE AND LETTERS OF HORACE BUSHNELL.** New York: Harper & Brothers. 8vo. Pp. 579.

DR. HENRY M. DEXTER, of the *Congregationalist* (Boston), is an accepted authority on whatever pertains to either the doctrines, polity, or history of American Congregationalism, and by putting what he knows into a book he has rendered a valuable service, not only to his own denomination, but also to the whole public, religious and literary. His volume* is literally a *thesaurus*, a store-house of facts and references for the use of future historians and controversialists, and it will be accepted as an authority not to be lightly called in question, and as well a monument of industry, ability, and fidelity to the truth. A notice of this great work, in a late number of the *New York Observer*, appears to us so apposite and discriminating that we venture to adopt some of its chief passages instead of any thing that we may write:

"It shows upon its face the fruits of immense toil, pains-taking research, careful annotation of authorities, original investigation and discovery, and the frank, clear, and faithful presentation of such truth as the able historian has gleaned in the books and manuscripts to which he had access here and abroad, covering the last three centuries. Some of these records which he has now placed intelligibly before the world concern the point of divergence of Separatism from Puritanism; the discovery of the substantial early autobiography of Robert Browne, and of several of his treatises unknown before, and the development from them of a truer theory of his life and character, and a more exhaustive and symmetrical outline of his actual system; the exhibition of the Presbyterio-Congregational nature of the Barrowistic separation, as distinguished from the practical, though unintended, democracy of Brownism; the first clear, connected, and reasonably complete account of the various English Separatist Churches which in the early part of the seventeenth century found refuge in Holland, with their relations to each other, and especially their points of mutual repulsion. . . . The making clear that the early Congregationalism of New England was Barrowism and not Brownism, and of the natural relation of the system of Ruling Elders to that fact; the discovery and description of the long-lost manuscript 'Cam-

bridge Platform,' prepared for that synod by Ralph Partridge, of Duxbury.

"These are some of the points to which the author calls attention and invites criticism. He declares that Presbyterianism and Congregationalism can not work together in the same organism. And the discussion of this question in theory and in history will prove of stirring interest to many not of the Congregational body. Not less important and timely is the author's exhibition of the relation of Congregationalism to platforms, confessions, and creeds. He well observes that a binding creed, as a statute law, is not possible for the whole body, because 'there can be no human tribunal higher than the local Church' [in this denomination]."

VERY valuable contributions have been made of late to the literature of the classics, a fact of no little importance in itself, and also highly gratifying as indicative of the appreciation of the subject by some of the most scholarly and competent of our writers. In addition to a number of works of this class, lately noticed in these columns, we have now before us a work of unusual merit, devoted to *classical Greek literature*.* The first volume is devoted to poets, and covers the whole field, beginning with the age before Homer, and coming down to Aristophanes and Menander, closing with an appendix devoted to a discussion of "the language of the Greek Epic Poets," and "the date of the *Odyssey*," in all of which may be found a large amount of literary history and not a little criticism, both acute and appreciative. The second volumes "The Prose Writers," extends from Herodotus and his contemporaries, to Aristotle, with a chapter on The Last Historians of the Fourth Century (B. C.), after which date it is assumed that the Greek language ceased to be classical. These are books that can not fail to be real, and, indeed, exquisite luxuries to any one capable of properly appreciating them.

VERY many books on the Holy Land, surveys, travels, journals of residences and general description, have been published during late years, having their various degrees of excellence, and together making valuable contributions to Biblical learning and to the

* THE CONGREGATIONALISM of the Last Three Hundred Years, as seen in its Literature; with Special Reference to Certain Recounted, Neglected, and Disputed Passages. In twelve lectures, delivered on the Southworth Foundation, in the Theological Seminary at Andover, Mass., 1876-1879. By Henry M. Dexter. New York: Harper & Brothers. Royal octavo, pp. 716. Appendix, pp. 356.

* A HISTORY OF CLASSICAL GREEK LITERATURE. By the Rev. J. P. Mahaffy, M. A., Fellow and Professor of Ancient History in Trinity College, Dublin. In two volumes. I. The Poets; II. The Prose Writers. Harper & Brothers, pp. 525 and 458.

Christian evidences and as well to geography, both historical and physical, and to philology and ethnology. We have now in hand the latest of its class, but certainly not the least valuable. A rather sumptuous volume of "Recent Travels and Explorations in Bible Lands,"* by Dr. F. S. De Hass, the records of his own personal observations made during several years residence at Jerusalem as American consul. The book is chiefly a record of personal observations in the form of narratives of excursions for exploration and sight-seeing and descriptions of objects of interest. Its lack of accurate measurements and learned discussions about places and things is more than compensated by the freedom and naturalness of the narrative, the air of cheerfulness that is thrown over the subjects treated of, and the vein of devout credulity with which many of the local legends are accepted. The first part, of nearly a hundred pages, is devoted to Egypt and especially to those subjects in that wonderful land that relate to Biblical affairs. The second part, of two hundred pages, is given to the Holy Land proper, and especially to the ancient Land of Judea, and part third relates to "Trans-Jordanic Palestine." The plan of the work is felicitous, and the author's methods of treatment will certainly be appreciated by the great body of readers. The writer is certainly to be congratulated on the completion of so creditable a work and on being able to present it in a form so inviting.

HARPER & BROTHERS have added to their splendid library of historical works which

they have been re-issuing during the last year *Gibbon's Fall and Decline of the Roman Empire* (Milman's edition) in six superb volumes, uniform with those of the same class heretofore issued. The work itself is too well-known to require or admit of either description or criticism, and in respect to the volumes of this particular edition it is enough to say of it that, like their predecessors of the same set of books, they are a plain, substantial, and not inelegant specimen of the book-maker's art. And as they are sold at the very moderate price of two dollars a volume these works ought to find their place in many private as well as public libraries. Such enterprise on the part of the publishers is in the interest of the public both financially and educationally, and deserves a liberal response.

Alexander Pope; by Leslie Stephen, is the title of the seventeenth number of *English Men of Letters*, edited by John Morley. Like most of its predecessors in the same series, it is rather a biographical sketch, with brief notices of the principal works of its subject, apparently careful and discriminating as to matters of fact, and justly appreciative of the genius and production of the greatest of English versifiers.

The Tragedy of King Richard III is Mr. W. J. Rolfe's last contribution to his carefully revised and edited, and beautifully printed series of Shakespeare's plays. To say that this one fully sustains the high standard attained by its predecessors, as we certainly can do, is itself sufficiently high praise.

EX CATHEDRA.

THE AMERICAN NATION OF THE FUTURE.

WHILE our politicians and *soi-disant* statesmen in their debates and platforms have much to say about the details of our public affairs, and are arranging themselves in hostile parties to promote or hinder the success of certain schemes or lines of policy, it seems rather

strange that the deeper and more pregnant questions of the personal composition and character of the nation command but very little of their attention. The press and the forum and beyond all else the "stump," are valuable in their discussions of questions of finance and of tariffs, of the army and the navy

* RECENT TRAVELS AND EXPLORATIONS IN BIBLE LANDS. Consisting of Sketches Written from Personal Observations, giving Results of Recent Researches in the East, and the Recovery of many Places in Sacred History Long Considered Lost. Illustrated with New

Maps and Many Original Engravings. By Frank S. De Haas, D. D., Member American Geographical Society. Late United States Consul at Jerusalem. New York: Phillips & Hunt. Cincinnati: Walden & Stowe. 8vo. 455 pp.

of the rights and powers of the national and the State governments severally, and of the records of the great political parties, and by the prominence given to these things it is assumed that they comprise our highest public interests. But to the thoughtful, who look beyond the mere outside of affairs, it must appear that while these things are agitated upon the surface there are certain undercurrents in the social and political ocean which, though but little observed, are much more effectively modifying the character and fashioning the destiny of the nation. Civil and political institutions are much less the creators than the creatures of the characters and manners of the people, and accordingly any considerable changes in these will draw after them as legitimate consequences corresponding changes. To know the character of a people is to possess the key to all their social and political institutions, for, to a very large extent, it may be assumed that governments are just what their subjects make them, varying, if at all, in favor of the better rather than the worse.

The forms of political institutions set up in this country a hundred years ago, were not the creations of the men of those times, but rather they were the growths of preceding centuries in both this and the mother country, as were also the men of those times the products of their own antecedents and environments. Probably the American character in its specific individuality was better defined at that period than it has been at any subsequent date though it continued with but little change for half a century longer, because the composition of the popular mass was nearly the same during all that time. It was as to any social and governing influence, a purely Caucasian stock drawn chiefly from an English ancestry, originally surcharged with the spirit of liberty and in love with its ideas, which having been cherished through two or three generations in the independence and isolation of their new home had become the substance and groundwork of their character. Such were the people who fashioned our political institutions as they appear in our declarations and bills of rights and in our State and national constitutions, all of which presume the continued presence of just such a social community as that for which these things were originally ordained and of such

persons as those by whom they are to be cherished and enforced.

It is evident, however, that the state of society among us at this time differs very widely from that of the days of the fathers of the republic. The classes and parties of the colonial times had even then been fused into a homogeneous mass, and the specifically American character had been developed which the succeeding half century confirmed and established. And as in the first place, only in such a state of society as then existed could such institutions be established as were set up by them, so only by such a people could they be maintained and rendered effective. The astounding question that confronts the far-seeing patriot and statesman who contemplates the present and immediate future of this country, is whether these institutions can be perpetuated and carried into practical effect among our conditions.

Originally our race stock was exclusively Caucasian, for though both the American Indian race and the African were found upon our territory, yet neither of these entered into the body politic or was a real factor in the social structure. So, too, we were specifically an English-speaking people and a Protestant nation as to all our mental habits and ideas of personal liberty both of thought and action; yet full of religious reverence, Sabbath keeping, Bible reading, and law abiding. But our last half century has seen all this very largely and unfavorably modified by immense immigrations from abroad, of persons not in harmony with our ideas, who, through their children, are producing an alien race upon our own soil, and sadly diluting or transmuting the original character of the people. At the same time the enslaved race who at the first was an unrecognized factor in the population of the country, has risen to the position of American citizens, so constituting a social and political element among us that can not be ignored. And again by reason of the occupation of the whole of the national domain, the Indian tribes at first recognized and treated as *quasi* nationalities are necessarily brought within the authority of our laws, and so, however unwillingly, they too must become an integral part of the national body. And, last of all just now the first ripples of the inevitable tide of Asia's overflowing populations are be-

ginning to be felt on our western coast line, which, like the locusts or the army-worm, defy resistance by the sheer force of numbers.

We have invited the "oppressed of all nations" to come among us, and have extended to them the privileges of a domicile and the rights of citizenship; and they have come to change the face of society by their presence and their own essentially alien character. So, too, we have emancipated and enfranchised the negro race dwelling among us—the result of the necessities of the case quite as much as of political magnanimity—and these millions of Afro-Americans, with their ever-multiplying progeny, must hereafter be counted among our national population. The aborigines of the country have been steadily driven back till at last there is no longer any further place into which to crowd them, and now the only alternatives remaining are extermination or comprehension in the body politic. The former would be the simpler process, but it is a very difficult thing to extirpate so vast a multitude of helpless and unresisting people, however recklessly unjust and inhuman the destroyer may be. The Indian must, therefore, be set down as a constant quantity in the motley mass of the future population of the great republic. And as to the Mongolians, what can be said? Their right to the soil is as good as our own; for if possession by one race confers the right to exclude all others, then are the whites intruders and robbers on the whole continent; and, on the contrary, if it was right for our fathers to occupy the waste places of this continent, then, pray, why may not Chinamen use the same right?

But very likely that whole matter, as many others have done, will settle itself, not simply as a question of right or wrong, but by the irresistible workings of forces, which usually elude public attention, and which effectually resist opposition. The Chinamen have learned the way across the ocean, and they have in their power and skill to labor a commodity salable among us; and according to the well-known laws of trade, which are practically as resistless as those of gravitation, they will continue to bring their goods to our market—in the shape of their own bones and muscles—and they will not be effectually repelled. For a time the incoming tide may be a comparatively inconsiderable affair; but there is a vast

ocean of human life just beyond the watery frith which must sooner or later pour itself upon our shores; and whenever that shall be the case, by the very nature of our fundamental laws, they must become our fellow-citizens.

The presence of such vast masses of alien elements in the social and political body certainly presents a formidable question, and makes heavy demands upon our patriotism and philanthropy. Can the ascendancy of our American republic and Christian thought be asserted, maintained, and perpetuated among such tremendous disadvantages? On the answer to that question depends the future of the country; and we by no means despair of success, though the work to be done is certainly a very great one, and the opposing forces most formidable. The assimilating power of the American character is confessedly wholly unequaled, and the large numerical ascendancy of the strictly American element in our population ought to be a pledge of its complete ascendancy over all others. Nor are the recent accessions all of them unfriendly. Most of the non-Romanist Europeans that come to us very speedily become fused into homogeneity with those "to the manner born." And then the colored race, being entirely American in thought and character, must be reckoned as an auxiliary, and though not likely ever to be completely fused with the white race, yet are they none the less Americans. And quite surely when the Mongolians shall be Christianized, they will also have become Americanized. The hope of the American republic, and of the civilization, in which above all else we glory, will be found to abide in the practical effectiveness of its Christian element. Only let these strangers be brought under the power of the Gospel, and we may safely trust them with our civilization.

WORDS WITHOUT KNOWLEDGE.

QUESTIONS like those given below it is evident find place in not a few thoughtful minds, and accordingly some of our religious weeklies devote a department to them, and they are not unfrequent visitors at our table. Many times they are simply the result of want of learning, and involve nothing especially recondite or hard to be made understood; but in other cases, as in this one, there are real difficulties,

if not in the subject itself yet in the methods often adopted for its solution. Our correspondent writes:

"Butler in his Analogy (Part I, chap. v, sec. 4), says: 'Mankind and perhaps all finite creatures from the very constitution of their nature, before habits of virtue, are *deficient* and in danger of deviating from what is right, and therefore stand in need of virtuous habits for a security against this danger.' Query: Is this principle valid for those who have died before forming any habits? If not, why not? or how do we know not? If so, then may not such become sinners even in a world of purity as well as Adam or the angels that kept not their first estate?"

The difficulties here presented arise from previous assumptions, partly of what we know or what must be, and partly that we ought to know or be informed all about the processes and the *rationale* of the divine administration in human affairs. Butler's position given above is, no doubt, correct as matter of fact as to that portion of mankind who attain to years of understanding, and the same may or may not be the case with other rational intelligences. Of that, however, we know absolutely nothing at all, and any speculations upon the subject, as they must be without reason, so must their results be worthless. But from their wholly different conditions children who die in infancy can not be judged by the same rule. The Word of God informs us that they in common with all of Adam's posterity, have become involved in the evil results of the first transgression and also that they are included in the provisions and purposes of the Christ's work for men. Of the philosophy of all this or the details of the process we know absolutely nothing. (See Watson's Institutes, Vol. II, p. 59.)

"Habits of virtue" is an uncertain and misleading phrase, for neither of its terms is of such definite and unequivocal sense as to determine definitely its meaning. The latter is sometimes used as a synonym for moral goodness or ethical rectitude, and in that sense it seems to be employed by Bishop Butler in the above quotation. In other cases it indicates a heroic quality, some of the old Roman *virtus*, a

quality that enters into the Christian character by reason of the temptations and conflicts through which that character is gained and preserved. It is not certainly ascertained, however, that all holy creatures have become such through conflicts and victories. It may be so and quite as certainly it may not. The sense of the word habit is also equivocal. Historically, man's fixed moral status is the outcome of spiritual conflicts and victories, but it does not appear that the same condition could not have been given to them without these. In all the lower forms of life, both animal and vegetable, habits are congenital and complete from the beginning; may not the same be the case with the higher orders of being? The assumption that there can not be such a thing as con-"created goodness" of character is gratuitous, and any inference drawn from it is without authority. We have no right to conclude that all holy intelligences have at some time been exposed to temptation and danger of falling into sin and death, and any argument based upon such an inference is, of course, fallacious.

The last supposition in the above is also an assumption without proof. Adam did not become a sinner "in a world of purity," simply by the exercise of his own moral freedom, for the world in which he sinned was, for the time being, the theater of diabolical influences, without which it does not appear that his disobedience would have been morally possible. How "the angels who kept not their first estate" were brought to their overthrow is not told us, nor are we assured that they who have not so fallen have ever been exposed to temptation making their steadfastness problematical. And so in respect to human souls taken out of the world without any probationary conflicts "striving against sin" since "their angels do always behold the face of my (Christ's) Father which is in heaven." Surely it is not impossible to suppose that they may be "kept by the power of grace unto eternal salvation." Perhaps after all it may be best for us to believe just what we are told, and not to vex ourselves about what is not revealed.